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CHRISTIE BRINKLEY @2009 AMERICA'S MILK PROCESSORS

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Polaris for TIME

Inbox



Stem-Cell Study Moves Ahead

I WAS THRILLED TO READ ABOUT DOUGLAS Melton in the article "The Quest Resumes" [Feb. 9]. The work he and his colleagues are doing will result in numerous lives being saved and an end to the untold suffering of many who deal with chronic illnesses. Ali Curry, Holbrook, N.Y.

PERHAPS IF ALICE PARK HAD INTERVIEWED even one opponent of embryonic research. her article would not have lacked so many important facts. Adult (nonembryonic) stem cells, dismissed by Park as "less versatile," have already treated thousands of actual human patients in the fight against conditions like juvenile diabetes-a disease mentioned anecdotally by Park. Different types of adult stem cells (there are several) can be used for different situations; we do not need a one-size-fits-all cell that can become anything.

Brian Gillin, BROOMALL, PA.

NO ONE, INCLUDING FORMER PRESIDENT George W. Bush, is against stem-cell research. It's embryonic-stem-cell research that's debatable. The so-called dark days of the Bush Administration's stem-cell restrictions were a result of our former President's courage to enact policies that reflected his belief (shared by many) that life begins at conception. It's because of these restrictions that scientists discovered the exciting potential of other types of stem cells.

Diann Claassen, TEMPERANCE, MICH.

Passing Along Social Security

MICHAEL KINSLEY HYPOTHESIZES THAT the typical American family will be handing down Social Security entitlements to their children as an inheritance [Feb. 9]. Using the same Federal Reserve data Kinsley cites, the median net worth of couples ages 65 to 74 in 2004 was \$190,000. including housing assets. By definition of the term median, this value is far more representative of the typical American family than the average net worth of \$601,000 he quotes-which is skewed higher by the wealthiest 10% of families. That recalculation, combined with the large decline in net worth for most Americans in 2008, considerably weakens his premise.

James Strucharz, HOLYOKE, MASS.

BRAVO TO MICHAEL KINSLEY FOR DARING to point out that many recipients of Social Security do not really need it. Indeed, my wife and I inherited some Social Security from our parents, and it is likely that our children will inherit some from us. However, I disagree with Kinsley that fixing it would be a nightmare. Just pay me back what I put into the system over the years. A PROMISE ON SOCIAL SECURITY RE KINSLEY'S ARTICLE: I'M 67 AND started working-and paving Social Security taxes-when I was 13

LETTER [Feb. 9]. Nobody asked me if I wanted to pay the taxes. SENIOR The government, not I, dictated the rules of the game. I based some of my decisions about how much I needed to save for retirement on the promises made to me by my

government. Who knows? Maybe I'll kick the bucket tomorrow and the government will really benefit. If not, I expect it to live up to its word. What justification could there be for such a damaging breach of contract? Leo Perk, WILLIAMSBURG, VA.

Any more than that is simply welfare, and I should receive it only when I desperately need it. Of course, to make such a radical change, Congress would have to show some backbone to withstand the weight of a million AARP members descending on them. Are we really ready for President Obama's "new age" of "hard choices"?

Chuck Irwin, WILLIAMSBURG, VA.

RETURNING SOCIAL SECURITY BENEFITS to the government is ludicrous. People who have paid their taxes for decades

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IMPORTANT INFORMATION: If you have a stomach ulcer or other condition that causes bleeding, you should not use PLAVIX. When taking PLAVIX alone or with some other medicines including aspirin, the risk of bleeding may increase so tell your doctor before planning surgery. And, always talk to your doctor before taking aspirin or other medicines with PLAVIX, especially if you've had a stroke. If you develop fever, unexplained weakness or confusion, tell your doctor promptly as these may be signs of a rare but potentially life-threatening condition called TTP, which has been reported rarely, sometimes in less than 2 weeks after starting therapy. Other rare but serious side effects may occur.

Ask your doctor how PLAVIX can help increase your protection against future heart attack, stroke, and even death. Or visit www.plavix.com or call 1-888-264-3296.

See important product information on the following page.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.

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WHO IS PLAVIX FOR?

PLAVIX is a prescription-only medicine that helps keep blood platelets from sticking together and forming clots.

PLAVIX is for patients who have:

- · had a recent heart attack.
- · had a recent stroke.
- · poor circulation in their legs (Peripheral Artery Disease).

PLAVIX in combination with aspirin is for patients hospitalized with:

- · heart-related chest pain (unstable angina).
 - heart attack

Doctors may refer to these conditions as ACS (Acute Coronary Syndrome).

Clots can become dangerous when they form inside your arteries. These clots form when blood platelets stick together, forming a blockage within your arteries, restricting blood flow to your heart or brain, causing a heart attack or stroke.

WHO SHOULD NOT TAKE PLAVIX?

- You should NOT take PLAVIX if you:
- · are allergic to clopidogrel (the active ingredient in PLAVIX).
- · have a stomach ulcer
- · have another condition that causes bleeding.
- · are pregnant or may become pregnant.
- · are breast feeding.

WHAT SHOULD I TELL MY DOCTOR BEFORE TAKING PLAVIX?

Before taking PLAVIX, tell your doctor if you're pregnant or are breast feeding or have any of the following:

- gastrointestinal ulcer
- stomach ulcer(s)
- liver problemskidney problems
- a history of bleeding conditions

WHAT IMPORTANT INFORMATION SHOULD I KNOW ABOUT PLAYIX?

TTP: A very serious blood condition called TTP (Thrombotic Thrombotyopenic Purpura) has been rarely reported in people taking PLAWK. TTP is a potentially life-threatening condition that involves low blood platelet and red blood cell levels, and requires urgent referral to a specialist for prompt treatment once a diagnosis is suspected. Warning signs of TTP may include fever, unexplained confusion or weakness (due to a low blood count, what doctors call anemia). To make an accurate diagnosis, your doctor will need to order blood tests. TTP has been reported rarely, sometimes in less than 2 weeks after starting theraps.

Gastrointestinal Bleeding: There is a potential risk of gastrointestinal (stomach and intestine) bleeding when taking PLAVIX. PLAVIX should be used with caution in patients who have lesions that may bleed (such as ulcers), along with patients who take drugs that cause such lesions.

Bleeding: You may bleed more easily and it may take you longer than usual to stop bleeding when you take PLAVIX alone or in combination with aspirin. Report any unusual bleeding to your doctor.

Geriatrics: When taking aspirin with PLAVIX the risk of serious bleeding increases with age in patients 65 and over.

Stroke Patients: If you have had a recent TIA (also known as a mini-stroke) or stroke taking aspirin with PLAVIX has not been shown to be more effective than taking PLAVIX alone, but taking aspirin with PLAVIX has been shown to increase the risk of bleeding compared to taking PLAVIX done.

Surgery: Inform doctors and dentists well in advance of any surgery that you are taking PLAVIX so they can help you decide whether or not to discontinue your PLAVIX treatment prior to surgery.

WHAT SHOULD I KNOW ABOUT TAKING OTHER MEDICINES WITH PLAVIX?

You should only take aspirin with PLAVIX when directed to do so by your doctor. Certain other medicines should not be taken with PLAVIX. Be sure to tell your doctor about all of your current medications, especially if you are taking the following:

- aspirin
- nonsteroidal anti-inflammatory drugs (NSAIDs)
 warfarin
- heparin

neparin

Be sure to tell your doctor if you are taking PLAVIX before starting any new medication.

WHAT ARE THE COMMON SIDE EFFECTS OF PLAVIX?

The most common side effects of PLAVIX include gastrointestinal events (bleeding, abdominal pain, indigestion, diarrhea, and nausea) and rash. This is not a complete list of side effects associated with PLAVIX. Ask your doctor or pharmacist for a complete list.

HOW SHOULD I TAKE PLAVIX?

Only take PLAVIX exactly as prescribed by your doctor. Do not change your dose or stop taking PLAVIX without talking to your doctor first.

PLAVIX should be taken around the same time every day, and it can be taken with or without food. If you miss a day, do not double up on your medication. Just continue your usual dose. If you have any questions about taking your medications, please consult your doctor.

OVERDOSAGE

As with any prescription medicine, it is possible to overdose on PLAVIX. If you think you may have overdosed, immediately call your doctor or Poison Control Center, or go to the nearest emergency room.

FOR MORE INFORMATION

For more information on PLAVIX, call 1-800-633-1610 or visit www.PLAVIX.com. Neither of these resources, nor the information contained here, can take the place of talking to your doctor. Only your doctor knows the specifics of your condition and how PLAVIX fits into your overall therapy. It is therefore important to maintain an ongoing dialogue with your doctor concerning your condition and your treatment.

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Inbox

should not be penalized because, unlike the government, they managed to invest and save some money.

John and Anne Molnar, SYLVANIA, OHIO

The Outest Mayor

DEPENDING ON YOUR DEFINITION OF "major US. City." Sam Adams, the new mayor of Portland, Ore., is not necessarily the first openly gay man to lead a major U.S. city Ifeb. 9. That designation may more deservedly go to David Cicilline, the mayor of Providence, R.I., elected in 202. Portland's population is bigger, but Providence is its state's capital. That's pretty major in its own right.

Rick Carson, ST. PETERSBURG, FLA.

The Perils of Peacekeeping

REALEX PERKY'S "CONGO SEKES PROTECtion": I think it's great that Tixe covered an issue that wasn't on the evening news, but I am disappointed that Perry merely glanced at the problems faced by the U.N. peacekeeping force [Feb. 9]. Although the World with some success in the second half of the 2oth century, never before has it forcibly implemented a cease-fire. It is having such difficulty stemming the violence simply because no one's ever done it before.

Rick Say, WEST CHESTER, PA.

Gaza Voices

MOSES WOLLD CRY IF HE READ "VOICES from the Rubble" [Feb. 9]. Moses would cry for the three little Palestinian grils shot by Israeli soldiers who were on a candy break. Moses would cry for the parents and grandparents unable to help their children. Moses would cry for the soldiers so steeped in a national bunker mentality that they no longer value the lives of Palestinian civilians. Moses would cry for his people, who have lost sight of the biblical guideline on proportionate retaliation: "An ever for an eve. a tooth for a tooth."

Lowell Klessig, AMHERST JUNCTION, WIS.

THE PLAINTIVE "VOICES FROM THE RUBBLE" are clearly symptomatic of denial by the Gaza residents of their own culpability for civilian deaths. Gazans elected Hamas and enthusiastically supported and lauded the relentless bombardment of traumatized

and beleaguered Israeli civilians by tens of thousands of deliberately targeted rockets and mortars. It is surely time for Gazans, and in fact all Palestinians, to internalize that actions have consequences and Israel has practiced unwarranted restraint in the face of the deadly provocation it could no longer ignore.

Fay Dicker, LAKEWOOD, N.J.

HOW CAN THE ISRAELI GOVERNMENT claim that its Defense Forces "is an ethical army" in light of such atrocities? Israel clearly timed its attacks to coincide with the vacuum of power between U.S. Presidents, banking on our indifference. And to our shame, their bet paid off, for they've again gotten away with it.

Tamra Fallman, ITHACA, N.Y.

Props for Rover

MICKEY ROURKE IS A COMPLEX, TALENTED actor [Feb. 9]. The therapeutic benefits of dogs for the rugged Rourke provides proof that canines are man's best friends.

Brien Comerford, GLENVIEW, ILL.

Don't Hate on Hudson!

RE "POP CHART": I DON'T THINK IT WAS
the least bit "predictable" that Jennifer
Hudson sang the national anthem at the

Super Bowl [Feb. 2]. Given what she's been through in the past six months, it showed remarkable fortitude for her to manage to perform yet at all.

Jennifer Fisher, TUCSON, ARIZ.

Prayer in the Heartland

I HAVE WITNISSED THE TROUBLES OF UTUAL CHUTCHES that David VAM Biema captures so well [Feb. 9]. I very much appreciate the current perspective. When I was growing up, my home church was one of five served by one pastor, so the yolk ing concept has been around in some way for a long time. The good news, though, is that God is still there, even if many of the pastors have left.

Dale Haakenson, VALLEY CENTER, CALIF.

WHEN I WAS GROWING UP A PREACHES'S kid in the 1950s, there was little encouragement for a young woman like me to pursue Christian ministry as a career. My desire was to serve small, struggling rural churches without a pastor. I got my wish! I highly recommend lay ministry as a very rewarding second career for American Christians looking not only for fulfillment but also for a new and exciting way to live their faith.

Judy Connors, WICHITA, KANS.

'After Mickey Rourke's tremendous performance, my one question is, Can you say "Oscar"?'

Michael Fiori, SCHENECTADY, N.Y.



Comeback kid The Wrestler star and Best Actor nominee answered Time's 10 Questions



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Giorgio Armani will now take your questions

How did you first get into fashion design?

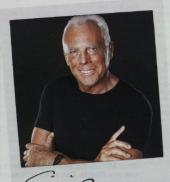
Haisam Younes SARASOTA, FLA. It happened accidentally. I was doing my military service and I had 20 days off on vacation in Milan. A friend said. "Do you want to work for two weeks for a photographer in a department store?" and I said yes. I started assisting the photographer, designing the windows and things. Soon after that they asked me to oversee the fashion. And I thought, Why not? It was creative work. It involved teamwork. After a few years I realized that this was really what I wanted to do for the rest of my life.

As a fashion designer, do you ever think that people worry too much about their appearance? Alvssa Goodman

KING OF PRUSSIA, PA. I should say, "We are never concerned enough with our appearance!" But it has become so important, how we look to others. Sometimes it is too much. We can be fine in life without the latest Armani dress. We can be happy just seeing a film with friends. But this is the trend now, to worry about our appearance.

Does the Armani brand suffer a lot of damage because of counterfeit products?

David Remenvik, BUDAPEST Personally, I think counterfeit products are good because their existence shows that we create something people want to copy. Professionally, it causes big problems because it creates products with your name on them that are not controlled by you.



What is the worst fashion statement you have seen to date?

Sarosh Shaheen, OTTAWA The most negative trend is that we designers forget that a dress or suit is not necessarily going to be worn by a professional model who is 6 ft. [183 cml tall. We often forget that fashion should be designed for real people who live real lives.

What new green fabrics or products are inspiring your fashion? Marilou Petlowany

KYLE, TEXAS I did an ecological collection a few years ago. Some ecological fabrics don't do much for the woman or man who wears them. But we have to think of the world we live in, so we have to think about using these fabrics more.

How would you have dressed First Lady Michelle Obama for the Inauguration?

Madea Metcalf NEW YORK CITY It's important that she doesn't overdress because she has a very strong presence. She should make herself seen, of course, but hide herself a little too.

What do you still wish to accomplish in your lifetime? Elizabeth Chapman

PRINCETON, N.I. Get back my personal freedom! I have done so many things in my work to satisfy the public. This kind of commitment means I have lost my private life. Would I like to make a film someday, or travel more or write a book?

Sure. But my work in fashion has kept me from doing these things. That is my only regret.

Are you planning on appointing an heir to take over your responsibilities upon retirement?

Luca Zanzi, ALLSTON, MASS. I don't think so. I am going to continue to teach the people who work for me as a team. That's how we work now: someone creates the jackets. someone else creates the jewelry. It should be the house and the brand that matters

What advice would you give to aspiring young designers in the current economic climate?

Ahmad Aboushagor BATH, ENGLAND If you want to be known as a designer in your own right, do something to make a mark, then work every day at it and create your style. In this economy it is very difficult though.

You recently accused Dolce & Gabbana of copying one of your designs. Do you plan to pursue this claim in court?

Alice Goodman, SYDNEY No. This happened at the end of a small press conference. One of my colleagues brought me a photo of this pair of pants. I said, very nonchalantly, "Look-great designers like Dolce & Gabbana copy us!" I was joking, it was not serious, but naturally the press picked up on it and splashed it all over the headlines.



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Postcard: Savannah. Facing budget woes, Georgia mulls merging its white and black colleges. This time, many African Americans are saying no.

Fighting to keep separate schools separate

BY LAURA FITZPATRICK

S AMERICA'S FIRST BLACK PRESIdent settles into the Oval Office, it seems an odd time for Georgia to be up in arms over school integration again. In 1961, when a federal court ordered the University of Georgia to admit two black students, 1,000 white rioters hurled firecrackers, bricks and racial epithets through dorm windows. But 1961 this is not: today a white Republican is leading the charge, and black students and lawmakers are fighting for the status quo.

With Georgia facing a \$2 billion budget shortfall, Seth Harp, chairman of the state senate's higher-education committee, has proposed merging historically black public universities with mostly white schools nearby to cut administrative costs. Among other drawbacks, critics say, the move could mean fewer scholarships, larger classes and teacher layoffs. But race is the thorniest issue by far. "We've made tremendous progress in Georgia," says Harp. "I just think it's the right time to get rid of this vestige of legal segregation."

Take Savannah State University, a 173acre (70 hectare) campus of tawny brick buildings and Spanish-moss-covered oaks that hosts some 3,400 students. Under Harp's proposal, it would keep its name but merge with Armstrong Atlantic State, a majority-white school of about 7,000 down the road. Founded in 1800 as the Georgia State Industrial College for Colored Youth, Savannah State opened at its current site on a wooded GEORGIA salt marsh in 1891, 70 years before the state's universities were integrated. Its first president, Richard Wright Sr.,

But whereas Harp sees such schools as the product of an "ugly chapter in Georgia's history," black students and educators see them as a point of African-American pride. While historically black colleges and universities (HBCUs) make up just 3% of U.S. schools, they produce nearly a quarter of all African-American

was born into slavery.



Historical pride A Savannah State student practices dance moves on the campus green

graduates. A 2007 study showed that black men who attend a black college as opposed to another four-year school enjoy a hefty lifetime-earnings boost. HBCU alumni include Booker T. Washington, Toni Morrison, Sean (Diddy) Combs, Oprah Winfrey and more than a third of the current Congressional Black Caucus.

Many Savannah State students say an awareness of their heritage is one of the school's biggest selling points.

"I take pride in it that African Americans who built this school at this time were going through such a hard struggle," says freshman Jamal Lewis, 19, standing a few paces from Hill Hall, the oldest building on

campus, erected in 1901 by some of Savannah State's first students. If the schools were to merge, says Telena Johnson, 24, "I definitely would feel like I was being robbed."

But black schools, Savannah included, have their problems. Nationwide, 41% of black students graduate from college within six years (for white students, the figure is 59%). The rate is lower at the

majority of HBCUs, which often accept low-performing students who may not have been given a chance elsewhere. At Savannah State, the figure hovers around 35%. A bigger problem is money: HBCUs are chronically underfunded, and Savannah State-with an endowment of just \$3.4 million, compared with Armstrong's \$7.9 million-is no exception. Harp expects the merger to help close that gap. an aspect of the plan that is winning over some critics. Emanuel Jones, chairman of Georgia's Legislative Black Caucus, says his "ears perked up" at talk of funding disparities, and he is co-sponsoring a resolution to study the merger's impact in detail. For now, the proposal is "not actually being considered by the [board of regents," the only group with the authority to approve it, says John Millsaps, a spokesman for Georgia's university system. And while Chancellor Erroll Davis Jr. has said the plan could save money, he has also stated that it would harm students.

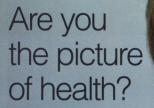
In the meantime, some students see at least one advantage to the merger. "A few people said, 'See it for the social aspect,' says Savannah State sophomore Guannue Bouquia, 20. "More parties."

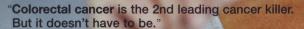
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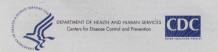
Katie Couric, Co-Founder EIF's National Colorectal Cancer Research Alliance

Photo by Andrew Eccles

Colorectal cancer and precancerous polyps don't always cause symptoms. So you can look healthy and feel fine and not know there may be a problem. Screening helps find polyps so they can be removed **before** they turn into colorectal cancer. This is one cancer you can prevent! Screening can also find colorectal cancer early, when treatment often leads to a cure. If you're 50 or older, make sure you really are the picture of health. Get screened for colorectal cancer.



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Briefing THE WORLD | VERBATIM | HISTORY

POP CHART MILESTONES



The Moment

217109: New York City

SO THERE'S A STEROID THAT makes an athlete stronger without inflating him like Bluto. Who knew? It's called Primobolan, and Yankees superstar Alex Rodriguez has admitted using it in 2003 as a Texas Ranger, Given recent scandals, fans may soon need a chemistry degree to read the sports pages. Deca-Durabolin, stanozolol, human growth hormone, Depo-Testosterone, the cream, the clear-you can't keep 'em straight without a program.

The news, first reported by SPORTS ILLUSTRATED, that perhaps the best player in the game used to juice was depressing—but maybe not shocking. Baseball's drug problems are as durable as horse-hide, and A Rod's Primobolan boosters were arguably less dangerous than Mickey Mantle's experiences with booze and sneed.

But there are other lessons to be learned from the fact that this epically gifted young player felt compelled to improve on nature. First, steroid use isn't just about individual choice. If Player A starts juicing and raises his home-run output by half, then Player B will conclude that he must shoot up to keep up. At the other end of the alphabet,

If we wanted a pharmacological freak show, we'd watch pro wrestling

though, Player Z is keeping up with Player Y, and both are in high school. If being Alex Rodriguez isn't enough, what is?

Second, baseball still has a lot of cleaning up to do. In his televised confession, Rodriguez cited the "looseygoosey" attitude toward drugs earlier this decade. That's putting it mildly. The decision by management, coaches and the players' union to ignore the steroid problem was a beanball aimed straight at the sport's credibility. If we wanted a pharmacological freak show, we'd watch pro wrestling.

And third, never underestimate the shamelessness
of the owners. Tom Hicks,
A Rod's employer in 2003, said
he felt "betrayed and deceived."
Like Claude Rains in Casablanca, the lords of baseball are
shocked, shocked by the lucrative corruption right before
their eyes. Where did they
think all those crowd-pleasing
homers were coming from?
—NY DARIY DON DREHLE.

The World



1 France

Every Country for Itself?

Detroit's automakers aren't the only ones getting a helping hand. French President Nicolas Sarkozy has proposed loans of



\$3.9 billion each to Peugeot Citroën and Renault in exchange for promises that the companies won't enact lavoffs in France. The proposal drew charges of protectionism from other E.U. members.

The government

consumers who

of \$1,900 to

will offer payments

trade in older models

to buy new vehicles

who say the plan could force the carmakers to cut workers in other countries. Other recent E.U. auto-assistance deals:



Carmakers will have access to \$3.2 billion in loans, some of which is intended to encourage more fuelefficient vehicles



GERMANY

PORTUGAL People who trade in A \$1.2 billion a car that's at least stimulus package nine years old will was approved for get \$3,200 toward the auto industry, the purchase of a including loans for car new one and parts exporters

2 Pakistan Movement On Mumbai

Attacks In a leaked report from Pakistan's

government about last November's terrorist attacks in Mumbai, officials purportedly admitted that at least five of the 10 gunmen who killed more than 160 people during the three-day rampage were of Pakistani origin, Although investigators in Islamabad had previously confirmed that the lone surviving gunman (in Indian custody) is Pakistani, they had repeatedly denied that the others were from their country. The report. which was expected to be made public by Feb. 13, also says the plot was hatched via the Internet in Dubai and an unnamed European country.

3 Tehran

Khatami Makes a Comehack

Former two-term Iranian President Mohammed Khatami announced that he plans to run again, in upcoming elections scheduled for June. The liberal



leader and respected cleric was criticized for his inability to follow through on his reformist agenda while in office. Khatami said he considers running against the incumbent,

claiming that drastic political changes are needed to prevent further harm to Iran's economy and international image.



Rescue workers found charred bodies in areas where residents stayed behind to defend property

4 Australia

Engulfed in Flames

With no mandatory evacuation system in place, the deadliest wildfires in Australia's history have killed at least 181 people and destroyed more than 750 homes, Some 1,100 sq. mi. (2,850 sq km) have burned. Authorities say at least one of the fires, which began near Melbourne on Feb. 7, was arson. Prime Minister Kevin Rudd called the act "mass murder."

5 California

Decrowding The Prisons

A federal panel has tentatively ruled that California's prison population-about 153.000 inmates spread over 33 facilities-must be reduced by as many as 55,000 within three years. The decision is the culmination of a long-running attempt to remedy the state prison system's problems with overcrowding and poor medical care:

care system, placing it under the control of a federal receiver or health-care czar. JUNE 2006

JULY 2005

Federal Judge

Thelton Henderson

takes control of the

state's prison health-

Governor Arnold Schwarzenegger convenes a special legislative session to discuss overcrowding and recidivism. He proposes a \$6 billion plan to build more prison space.

MAY 2007

The governor signs Assembly Bill 900 to *provide critical relief to prison overcrowding" by creating more room and sending some prisoners out of state.

FEBRUARY 2009

The total in-state corrections population is down 4.1% from the previous year.



Numbers: 30% Chance that Democrats "are going to get it wrong" on the country's challenges, according to Vice President Joe Biden

Number of convicted sex offenders in the Czech Republic castrated in the past decade, despite protests from human-rights groups



6 Madagascar

A BLOODY CRACKDOWN Police killed more than 25 protesters on Feb. 7 in Antananarivo, the capital, when they fired into a crowd that was demanding the ouster of President Marc Ravolomanana. The episode came a week after Antananarivo's mayor and media entrepreneur, Andry Rajoelina, proclaimed himself the country's new ruler and began hosting daily rallies to deride the nation's "millionaire dictator." Ravolomanana later blamed the rallies for inciting the crowd and declared that he had removed the mayor from his post, though Rajoelina has refused to leave office.

7 Washington

Coffins. Uncovered?

Defense Secretary Robert Gates has ordered a review of the 1991 policy that bars the media from taking photographs of the flag-draped coffins of service members killed overseas, a restriction much criticized since U.S. troops have been in Iraq and Afghanistan. Gates said he may lift the ban "if the needs of the families can be met and the privacy concerns can be addressed." He said the review is on a "short deadline."



An investigator on the scene after the Taliban attack on Kabul's prisons directorate

8 Afghanistan

A Deadly Raid in Kabul's Heart

On the eve of a visit by Richard Holbrooke, the U.S. special envoy to Pakistan and Afghanistan, eight suicide bombers and attackers armed with assault rifles struck three government buildings in Kabul on Feb. 12, killing at least 20 people and wounding 57. Taliban spokesmen quickly claimed responsibility for the attacks, saving they were in revenge for the mistreatment of jailed insurgents.

10 Washington

Save the Economy. Save the World

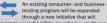
Calling the Bush Administration's financial-rescue plan "late and inadequate," Treasury Secretary Timothy Geithner outlined a revamped plan for stabilizing the ailing U.S. economy. Markets fell in response to the proposal, which critics hammered for offering few details. But Geithner laid out several key goals:

Financial institutions with more than \$100 billion in assets will be forced to pass government "stress tests" to assess whether they are prepared to keep lending during future economic downturns.



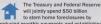
TARP Eligible banks will be permitted to access capital remaining in the \$700 billion Troubled Asset Relief

Program. Recipients will be required to show how the funds would promote new lending.



lending program will be expanded through a new initiative that will leverage up to \$1 trillion to unfreeze credit and rekindle moribund secondary lending markets.

In an effort to cleanse banks' balance sheets, the government will spend ASSETS up to \$1 trillion on a Public-Private Investment Fund that will provide private investors with incentives to acquire toxic assets.



will jointly spend \$50 billion to stem home foreclosures by reducing monthly payments and establishing modification guidelines for existing loans.

RECESSION



WATCH

As the economic crisis continues, more households are growing their own vegetables as a way to save cash. Seed sales at two gardening companies, W. Atlee Burpee and Park Seed, have soared 20% in 2009. The National Gardening Association expects home gardening in general to increase 20% this year.

17.5% Percentage drop in Unitiese exposed in January '09 from a year earlier—the biggest such dip in 10 years

200,000

9 Zimbabwe

Unity at Last?

Opposition leader

Morgan Tsvangirai

was sworn in on

Feb. 11 as the

country's new Prime Minister,

after nearly 11

months of political

negotiations with

who refused to step down as

President despite losing the March 29

presidential election

to Tsvangirai. More

than 100 members

however, remain in

of Tsvangirai's

political party,

police custody.

violence and stalled

controversial leader Robert Mugabe.

> Number of California government employees who are being forced to take unpaid "furlough Fridays" to deal with the state's budget crunch

Verbatim

'There goes billions of dollars, just burning.'

HU JING, one of hundreds of onlookers who watched Beijing's Mandarin Oriental hotel burn after an illegal fireworks display

'Eluana did not die a natural death. She was killed!'

SILVIO BERLUSCONI, Italian Prime Minister, reacting to the removal of Eluana Englaro's feeding tube. The 38-year-old woman had been on life support for 17 years

'Don't give me the wine-and-dine baloney, young lady.'

ARLEN SPECTER, Republican Senator, reprimanding radio host Laura Ingraham for suggesting that he supported the stimulus package because he attended a White House cocktail hour

'GM is not a career anymore.'

TOM SUARTO, a retired autoworker whose son will lose his factory job next month. Since 1912, four generations of Suarto's family have worked for General Motors

'We were nothing more than window dressing.'

HAZEL EDNEY, an African-American reporter, on not getting called on despite being seated in the front row of President Barack Obama's first prime-time press conference

'We can no longer save our compatriot. We are going to try to punish his killers.'

RADEK SIKORSKI, Polish Foreign Minister, after the Taliban released a video of the beheading of a Polish geologist in Pakistan. It was the first such killing of a Western citizen there since the 2002 murder of Daniel Pearl

'Politics can't be any dirtier of a job than the one I am already in.'

STORMY DANIELS, porn-film star, on running for Louisiana's U.S. Senate seat held by David Vitter















Back & Forth:

Secrecy

'The Justice Department will ensure the state-secrets privilege is not invoked to hide from the American people information that they have a right to know.'

MATT MILLER, spokesman for the DOJ, on its decision to continue George W. Bush's policy of dismissing lawsuits that could endanger national security

'This is not change. This is definitely more of the same.'

ACLU executive director
ANTHONY D. ROMERO,
accusing President
Barack Obama of reneging on
his campaign promises to make
government more transparent

Copyright

'We hope for an amicable solution.'

PAUL COLFORD, Associated Press

director of media relations, after the AP declared that it owns the copyright—and deserves credit and compensation—for the image used by graphic artist Shepard Fairey in his iconic portrait of Barack Ohama

'Fairey did not do anything wrong. He should not have to put up with misguided threats from the AP.'

JULIE A. AHRENS, an attorney for Fairey, announcing a countersuit that argues his use of the original photograph constitutes "transformative use," which is protected under copyright law

LEXICON

Fat tail n.-

In finance, the often underestimated probability of catastrophes like market crashes and terrorist attacks

This is another way of asking 'How come all you geniuses didn't realize the risk you were running?'"

-New York Times Magazine, Feb. 8, 2009

8

A Brief History Of:

Peanut Butter



HE RECENT SALMONELLA OUTBREAK AT THE PEANUT Corporation of America has led to the recall of more than 1,800 peanut-containing products, from off-brand dog biscuits to Trader Joe's vegan pad Thai, and sent sales of peanut butter plunging 25%, despite assurances that jars on supermarket shelves are not tainted. But the panic illustrates just how thoroughly the legume (Arachis hypogaea is, technically, not a nut), fashioned into a paste, has permeated the American diet. Spread on crackers, slathered on celery, melted with chocolate: peanut butter goes with almost anything.

Peanut butter's true inventor is unknown, but Dr. John Harvey Kellogg has as good a claim to the title as anyone. In 1895, the cereal pioneer patented a process for turning raw peanuts into a butter-like vegetarian health food that he fed to clients at his Battle Creek, Mich., sanatorium. The taste caught on, and in a few years, the spread had gone mainstream.

In 1922, chemist Joseph Rosefield fixed peanut butter's tendency to separate by adding hydrogenated vegetable oil; he called the thick, creamy result Skippy (probably after a popular comic strip), and a brand was born. Within the decade, Skippy was fighting it out with other established brands like Peter Pan and Heinz. Peanut butter and jelly sandwiches invaded children's lunch boxes soon after: by one 2002 estimate, the average American child eats 1,500 PB&J sandwiches before graduating from high school. In the 1990s, nut-allergy fears led some schools to eliminate peanuts from cafeteria menus. Still, peanut butter remains an \$800 million industry-which is one of the reasons lif and Peter Pan are spending millions on new ad campaigns to remind consumers how good food that sticks to the roof of your mouth can be. - BY CLAIRE SUDDATH

Peanut butter jelly time The creamy (or chunky) peanut spread has become a mainstay of the American diet

GOING NUTS





and corn into cereal, Dr. John Kellogg applies the process to peanuts

1922-32 George Washington Carver invents more than 300 uses for peanuts, including peanut cheese and



instant peanut coffee. Oddly, peanut butter is not among them 1920 Snickers hecomes

the first major candy bar to incorporate

1940S Wartime rationing of sugar and lard lead to increased popularity of peanut butter and jelly sandwiches



The Gamble: General **David Petraeus and the** American Adventure in Iraq, 2006-2008

By Thomas E. Ricks Penguin Press; 384 pages

HISTORY IS WRITTEN BY the victors, and that's plainly the case in Tom Ricks' gritty volume on the surge phase of the Iraq war. Generals David Petraeus and Ray Odierno are the flawed but authentic heroes who pushed through a strategy to suppress Irag's festering civil war; the losers are warlords like Donald Rumsfeld and Paul Wolfowitz, who agitated for the invasion and then lost control over its outcome through naiveté or ineptitude. Much of the Beltway intrigue here was reported by Ricks' Washington Post colleague Bob Woodward in last year's The War Within. Military strategies-even successful ones-are, like laws and sausages, not something civilians necessarily want to see made. Still, Ricks' reporting and insight from the front lines of Iraq support his conclusion that the U.S. is likely to be fighting there until at least 2015. His first book on the war, 2006's Fiasco, was a bleak tale of martial malfeasance. His second suggests there may be light at the end of the tunnel, but if there is, it's flickering-and a long way off. -BY MARK THOMPSON

DEAD SKIM TOSS

Pop Chart



TICKETMASTER and LIVE NATION to merge; concertgoers prepare for \$75 surcharges



JUDE LAW makes kind of a hot chick

SHOCKING

M.I.A.'S BABY to present an award at the Oscars, at this rate



plastic surgery to look more like Angelina Jolie. Truth: that is Angelina Jolie





and HODA KOTB'S
TO a.m. happy hour

SARAH PALIN says she named daughter Bristol after ESPN's Connecticut HQ. Good thing the network canceled that move to Sheboygan



STARS, Season 8: An Olympic gymnast, three crooks and Denise Richards walk into a reality show...



KATIE COURIC tee-hees her way through Lil Wayne interview



steven spielberg nails down Disney distribution deal. Now maybe someone will finally watch his movies

New KINDLE launched; newspapers bemoan lack of fish-wrapping functionality



MR. MARIAH CAREY to host America's Got Talent





JOAQUIN PHOENIX explains new hobo look as attempt to eliminate his "sex appeal" by growing beard, making fatuous comments

ORIGINAL VILLAGE
PEOPLE COP sues latest
version of the Village
People



SEX AND THE CITY sequel. Please tell us somebody gets Madoffed

SHOCKINGLY PREDICTABLE





Milestones



Lux Interior

THE CRAMPS' BIGGEST ALbum was 1980's Songs the Lord Taught Us, which, despite its underground popularity, proved that the Lord hadn't taught them much at all. But what the band lacked in musical skill it made up for with absurdist humor and attitude. Most of that emanated from gender-bent front man Lux Interior, who died on Feb. 4 in Glendale, Calif. He was 62.

Interior, born Erick Lee Purkhiser, started the Cramps with his wife, guitarist Poison Ivy Rorschach, in 1976. From the beginning, they were more an act than a band, their fusion of surf music, punk and rockabilly

(psychobilly, as it was known)

sounding better in theory than in sloppy 3-min. bursts.

But onstage, the Cramps were spectacular, Interior could stoke a crowd with writhing and pogo-ing that made Iggy Pop look like a folksinger, and when he opened his mouth to deadpan songs like "I Was a Teenage Werewolf," he could make the crowd laugh too. Perhaps the Cramps' most perfect performance was a 1978 concert at the Napa State Mental Hospital in California. "Somebody told me you people are crazy." Lux screamed from the stage, "but I'm not so sure about that!"

> The Cramps' lineup morphed continuously over the years, but Interior and Rorschach were constants in mu-

sic and in life. They remained happily married for 37 years. -BY JOSH TYRANGIEL

The son of Chinese farmers, Xiangzhong (Jerry) Yang, 49, never thought he would attend college. But in 1999. Yang, a prominent University of



Connecticut scientist and advocate for the use of human stem cells in disease research. became the first

person to clone a farm animal in the U.S.

■ She saw personal biographies as *old-hat, outdated and counterproductive," so Blossom Dearie, 82, the canary-voiced jazz and cabaret singer, preferred to talk about her future. Often that was her next gig. Her repertoire included songs for Schoolhouse Rock and standards like Dave Frishberg's "Peel Me a Grape."

Over his 60-year career, he played many roles, including an aged convict in The Shawshank



Redemption. To fans, character actor James Whitmore, 87, had a familiar face that he reinvented for each part.

■ After serving as a daredevil World War II pilot in the Royal Air Force, Terry Spencer, 90, shot photographs for LIFE for 20 years. He charted the Beatles' rise to stardom and covered wars in Africa, Asia and the Middle East.

RELEASED Sentenced in 2004 to house arrest for selling nuclear secrets to Iran. Libva and North Korea, A.O. Khan, 72, was released by a Pakistan high court on Feb. 6. Owing to lack of evidence, he was never charged and is unlikely to be indicted.

AILING Appointed by Bill Clinton in 1993, Supreme Court Justice Ruth

75, underwent surgery on Feb. 5 for a pancreatic

Betty Jameson

SHE CAPTIVATED A ROOM LIKE no one else with her infectious smile, graceful step and charming persona. One probably would never have guessed from looking at her that she was a fierce competitor at heart. As one of the 13 founders of the Ladies Professional

Golf Association (LPGA), Betty, who passed away Feb. 7 at 89, had a strong will and conviction that were key to opening doors for future generations of golfers, including me. Several months ago, I had the pleasure of being honored at the Hispanic Heroes Luncheon in West Palm Beach, Fla. Betty, a local resident, attended, and as I met her gaze in the audience, I was reminded that a true hero was sitting before me.

Betty saw golf not only as



right, with other LPGA founders

loved it as passionately as she did. She dedicated herself to all aspects of it-playing, organizing tournaments, establishing rules and more. While my fellow players and I do not have it as hard as Betty did in an era when women's sports were barely a blip on the radar, we have derived our own mission from the work of Betty and the other incredible first women of golf. Even with all the progress we have made since the LPGA's inception in 1950, there are always more goals, more opportunities and more ways of giving back. Betty never rested or lost sight of her vision. And for that reason, neither should we. -BY NANCY LOPEZ

a game but also as a serious

profession for women who

Lopez is a Hall of Fame golfer and four-time LPGA Player of the Year

The Paradox of Thrift. America is in dire need of a return to saving, frugality and prudence. But not yet

DON'T SPEND MORE THAN YOU MAKE.
Don't buy things you don't need. Save for a rainy day. If Americans had followed these simple rules over the past decade, there would be no financial crisis, no worst-since-the-1930s recession, no acrimonious Washington debate over what to do aboutit

Now we seem to be starting to rediscover thrift. Debt levels are falling. Consumer spending is down. The savings rate is on the rise. Great, right? Not exactly. The sudden sobering up of the American consumer happens to be the No. 1 force driving the U.S. and global economies downward. We're saving more, yet we're all getting poorer.

This is what some economists call the paradox of thrift. The notion is generally credited to Englishman John Maynard Keynes—seemingly the source of every important economic idea these days—although he doesn't appear to have actually used the phrase. Paul McCulley, an economist and portfolio manager at bond giant Pimco, defines it like this: "If we all individually cut our spending in an attempt to increase individual savings, then our collective savings will paradoxically fall because one person's spending is another's income—the fountain from which savings flow."

So what do we do about this? During the last recession, in 2001, President Bush famously urged the American people to get out and shop—and visit Disney World—to thwart the downturn. We did, and the recession was

There is no shortage of critics who contend that today's massive government spending is simply laying the foundation of another financial crisis

mild. It was followed; though, by an explosion of debt and imprudence. The savings rate (the percentage of personal income left after spending) fell below 17% for the first time since the early 1930s and stayed there from 2005 through 2007, Millions of Americans spent trillions of dollars on things—houses, mainly—the vouldn't afford.

A painful reckoning was inevitable.



And so now, while retailers and a few economists still make the case that more consumer spending would be a really great thing, our nation's political leaders have concluded that it's too soon to issue calls for more shopping. New York Times columnist David Leonhardt makes a clever pitch for spending now on things that will save you money later-such as Kindles and Costco memberships. But that's not going to stave off depression. And so government indebtedness and spending are being substituted for consumer indebtedness and spending. The federal deficit is projected to hit \$1.2 trillion this year, and that's not counting the close to \$1 trillion in further stimulus being contemplated by Congress.

This kind of behavior, contends McCulley, is what the paradox of thrift demands. "Uncle Sam has got to go the other direction and lever up his balance sheet and actually spend money," he says. Simply standing by and letting the downward economic spiral worsen strikes him as "inconsistent with a civilized society."

Still, the approach remains paradoxical. Our profligacy has gotten us into trouble, and so the response is ... more profligacy? There is no shortage of critics who contend that today's massive government spending is simply laving the foundation of another finan-

cial crisis, this one centering on a loss of confidence in Treasuries and the dollar.

For now, we're betting that it

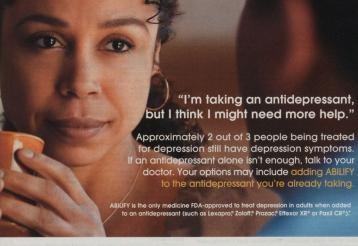
won't—and investors from around the world are letting us get away with it by continuing to buy U.S. government debt. We will, however, eventually have to shape up. Consumers must pay down their credit cards, and the country must pay down at least part of its debt. "Some of the painful adjustments that are taking place are not avoid able," says David Blankenhorn, founder and president of the Institute for American Values, a New York City think tank that for the past few years has made an obsession of the most of the state of the president of

sion of thrift. "Wringing debt out of our economy at every level is a painful and inevitable process, and it isn't going to be solved by charging more things at the supermarket."

the supermarket.

Blankenhorn isn't opposed to using government stimulus to ease the transition, but he's worried that it could obscure the need for big changes in behavior. "If the moral of today's crisis is 'Let's stimulate this and bail out that, and as soon as things get back to normal, we can go back to a debt culture,' that's just not a sustainable idea," he says.

He's right. Virtually all economists agree that there is no paradox of thrift in the long run. Saving stimulates investment. Careful stewardship of resources brings prosperity. Frugality is its own reward. Just not right this second.



IMPORTANT SAFETY INFORMATION:

Elderly patients with dementia-related psychosis (eg. an inability to perform daily activities due to increased memory loss) taking ABILIFY have an increased risk of death or stroke. ABILIFY is not approved for treating these patients.

Antidepressants can increase suicidal thoughts and behaviors in children, teens, and young adults. Serious mental illnesses are themselves associated with an increase in the risk of suicide. When taking ABILIFY call your doctor right away if you have new or worsening depression symptoms, unusual changes in behavior, or thoughts of suicide. Patients and their caregivers should be especially observant within the first few months of treatment or after a change in dose. Approved only for adults 18 and over with depression.

- · Alert your doctor if you develop very high fever, rigid muscles, shaking, confusion, sweating, or increased heart rate and blood pressure, as these may be signs of a rare but potentially fatal condition called neuroleptic malignant syndrome (NMS)
- . If you develop abnormal or uncontrollable facial movements, notify your doctor, as these may be signs of tardive dyskinesia (TD), which could become permanent
- If you have diabetes or have risk factors or symptoms of diabetes, your blood sugar should be monitored. High blood sugar has been reported with ABILIFY and medicines like it. In some cases, extreme high blood sugar can lead to coma or death
- Other risks may include lightheadedness upon standing, seizures, trouble swallowing, or impairment in judgment or motor skills. Until you know how ABILIFY affects you, you should not drive or operate machinery

The common side effects in adults in clinical trials (≥10%) include nausea, vomiting, constipation, headache, dizziness, an inner sense of restlessness or need to move (akathisia), anxiety, and insomnia. Tell your doctor about all the medicines you're taking, since there are some risks for drug interactions. You should avoid alcohol while taking ABILIFY.

IF AN ANTIDEPRESSANT ALONE ISN'T ENOUGH.

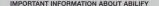




You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.

Please read the Important Information about ABILIFY on the adjacent page.

*Lexapro® (escitaliopram oxalate), Zoloft® (sertraline HCI), Prozac® (fluoxetine hydrochloride), Effexor XR® (veniafaxine HCI), Paxil CR® (paroxetine HCI) are trademarks of their





This summary of the Package Insert contains risk and safety information for patients about ABILIFY. This summary does not include all information about ABILIFY and does not take the place of discussions with your healthcare professional about your treatment. Please read this important information before you start taking ABILIFY and discuss any questions about ABILIFY with your healthcare professional.

ABILIFY® (a-BIL-ĭ-fī) (aripiprazole) (air-rī-PIP-ra-zall)

What is ABILIFY?

ABILIFY (aripiprazole) is a prescription medicine used as an add-on treatment to antidepressants for Major Depressive Disorder in adults.

What is depression?

Depression is a common but serious medical condition. Symptoms may include sadness. loss of interest in activities you once enjoyed, loss of energy, difficulty concentrating or making decisions, feelings of worthlessness or excessive guilt, insomnia or excessive signates a change in appetite causing weight loss or gain, or thoughts of death or suicide. These could be depression symptoms if they interfere with daily life at home, at work, or with friends and last most of the day, nearly every day for at least 2 weeks

What is the most important information that I should know about antidepressant medicines, depression, and other serious mental illnesses?

- · Antidepressant medicines may increase suicidal thoughts or actions in some children, teenagers, and young adults
- . Depression and serious mental illnesses are the most important causes of suicidal thoughts and actions

For more information, see the Prescribing Information and the Medication Guide called Antidepressant Medicines, Depression and Other Serious Mental Illnesses, and Suicidal Thoughts or Actions

Who should NOT take ABILIFY?

People who are allergic to ABILIFY or to any substance that is in it. Allergic reactions have ranged from rash, hives and itching to difficulty breathing and swelling of the face, lips,

or tongue. Please talk with your healthcare professional What is the most important information that I should know

about ABILIFY? Elderly patients, diagnosed with psychosis as a result of dementia (for example, an

inability to perform daily activities as a result of increased memory loss), and who are treated with antipsychotic medicines including ABILIFY, are at an increased risk of death when compared to patients who are treated with a placebo (sugar pill) ABILIFY is not approved for the treatment of patients with dementia-related psychosis.

Antidepressants may increase suicidal thoughts or behaviors in some children Autooppressints may increase seasons moragins or deceivers in some consents temporary, and purpose delices specification of the consent of the control of t especially if they are severe or occur suddenly. ABILIFY is not approved for use in pediatric patients with depression.

Serious side effects can occur with any antipsychotic medicine, including ABILIFY. Tell your healthcare professional right away if you have any conditions or side effects,

including the following Stroke or ministroke in elderly patients with dementia: An increased risk of stroke and ministroke has been reported in clinical studies of elderly patients with dementia (for example, increased memory loss and inability to perform daily activities). ABILIFY is not approved for treating patients with dementia

Neuroleptic malignant syndrome (NMS): Very high fever, rigid muscles, shaking, confusion, sweating, or increased heart rate and blood pressure may be signs of NMS, a rare but serious side effect that could be fatal.

Tardive dyskinesia (TD): Abnormal or uncontrollable movements of face. tongue, or other parts of body may be signs of a serious condition known as TD, which may be permanent

High blood sugar and diabetes: Patients with diabetes and those having risk factors for diabetes (for example, obesity, family history of diabetes), as well as those with symptoms such as unexpected increases in thirst, urination, or hunger should have their blood sugar levels checked before and during treatment. Increases in blood sugar levels (hyperglycemia), in some cases serious and associated with coma or death. have been reported in patients taking ABILIFY, and medicines like it.

Orthostatic hypotension: Lightheadedness or faintness caused by a sudden change in heart rate and blood pressure when rising too quickly from a sitting or lying position (orthostatic hypotension) has been reported with ABILIFY.

Suicidal thoughts: If you have suicidal thoughts, you should tell your healthcare professional right away.

Dysphagia: Medicines like ABILIFY (aripiprazole) have been associated with swallowing problems (dysphagia). If you had or have swallowing problems, you should tell your healthcare professional

What should I talk to my healthcare provider about?

Patients and their families or caregivers should watch for new or worsening depression symptoms, unusual changes in behavior and thoughts of suicide, as well as for anxiety, agitation, panic attacks, difficulty sleeping, irritability, hostility, aggressiveness, impulsivity, restlessness, or extreme hyperactivity. Call your healthcare provider right away if you have thoughts of suicide or if any of these symptoms are severe or occur suddenly. Be especially observant within the first few months of antidepressant treatment or whenever there is a change in dose

Tell your healthcare provider about any medical conditions you may have and all medicines that you are taking or plan to take, including prescription and nonprescription (over-the-counter) medicines

Be sure to tell your healthcare provider:

- If you have suicidal thoughts
- . If you or anyone in your family have or had seizures . If you or anyone in your family have or had high blood sugar or diabetes
- . If you are pregnant, plan to become pregnant, or are breast-feeding

What should I avoid when taking ABILIFY?

- · Avoid overheating and dehydration . Avoid driving or operating hazardous machinery until you know how ABILIFY
- affects you
- Avoid drinking alcohol Avoid breast-feeding an infant

What are the possible side effects of ABILIFY?

Common side effects in adults include: nausea, vomiting, constigation, headache, dizziness, an inner sense of restlessness or need to move (akathisia), arxiety and insomnia.

It is important to contact your healthcare professional if you experience prolonged. abnormal muscle spasm or contraction which may be signs of a condition called dystonia.

What percentage of people stopped taking ABILIFY due to side effects?

In clinical trials, the percentage of adults who discontinued taking ABILIFY due to side effects was ABILIFY (6%) and for patients treated with sugar pill (2%).

Can I safely take ABILIFY while I'm taking other medications? ABILIFY can be taken with most drugs; however, taking ABILIFY with some medicines may require your healthcare professional to adjust the dosage of ABILIFY.

Some medicines* include

- ketoconazole (NIZORAL®)
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U.S. Patent Nos. 5 006 528: 6 977 257: and 7 115 587 ©2008 Otsuka America Pharmaceutical, Inc., Rockville, MD 570US08CBS01601 0308L-1141 Printed in USA

D6-R0001D-05-08-MDD May 2008

ME BY STEPHEN KRONINGER; FLAG; RICK BARRENTINE—CORRIS

Klein

Israel's Anger Issues. The election has strengthened anti-Arab forces who are isolating the country from the world

ONE BY ONE, IN REVERSE ORDER, THE leaders of Israel's top three political parties appeared on television the night of the Feb. 10 elections and declared victory. This was clever, since none of them had really won. Avigdor Lieberman, whose extreme anti-Arab Yisrael Beitenu party finished third, went on first. His party had surged in the final weeks and would now, he boasted, be "the key" to forming a majority coalition in the 120-seat Knesset, Maybe, Benjamin Netanyahu, whose Likud party finished second, appeared next. He had won, he said, because Likud was the leading right-wing party and conservatives of various stripes had gained a majority of seats in the Knesset. But Netanyahu had been expecting a big victory; his support had plummeted in the last days. Finally, there was Tzipi Livni, whose moderate Kadima party won one more seat than Likud ... but didn't really win either, because Netanyahu was right: he would probably have an easier path to building a parliamentary majority than Livni would.

the results. It had been an uninspiring campaign. There was no Barack Obama in the race, even Lieberman, the hot candidate, was a tepid speaker. For Israelis, a nation of political junkies, the aftermath will be more fun than the campaign: there will be a fascinating dance as the various players wheel and backstab in search of a governing coalition. For the rest of the world, however, the results are cause for concern. And for the Obama Administration, Israel presents an even greater foreign policy challenge than

Israelis were both irked and entranced by

It will be much harder now for the U.S. to continue its unambiguous support of Israel's government before—especially if, as expected, Lieberman's extremists join the government.

If none of the winners really won, the loser—the Israeli left—clearly lost. The traditional liberal parties, Labor and Meretz, were decimated. Their supporters fled to the moderate Livni in the hope of thwarting a Netanyahu victory. After the war in Gaza, the peace movement seemed pointless: the Palestinians were shat tered, unable to govern themselves, much less negotiate a peace. It was telling that the best known figure on the Israeli left



was Labor's Ehud Barak, the man who had planned and executed the war. Of all the election-night orators,

Lieberman appeared the most confident. His support had grown since the war, on the strength of Jewish anger at Israel's indigenous Arabs, some of whom had cheered Hamas and waved Palestinian flags during the fighting. Among other things. Lieberman had suggested that Israel should fight Hamas as "the U.S. did with the Japanese"-which some people saw as raising the remarkable specter of innocent Israeli Arabs interned in concentration camps. "Lieberman has created a classic European anti-immigrant party," said Daniel Levy, a former Israeli peace negotiator. "Only his supporters are the immigrants, and their targets are people who have been on this land forever."

Indeed, much of Lieberman's support

came from the most recent immigrantsthe Russians, the Ethiopians, the refugees from Islamic persecution. For them, Lieberman's call for signed lovalty oaths by all Israelis, including Arabs, seemed an obvious requirement for citizenship. But there was also a cold fury among mainstream Israelis who had given Gaza back to the Palestinians only to find it ruled by Hamas, armed by Iran and lobbing missiles across the border on a daily basis. "We have to crush terror and eliminate Hamas," Lieberman said on election night, laying out his price for joining any coalition. "There can be no cease-fire with Hamas. There can be no negotiations, direct or indirect."

So who is this Lieberman, and where did he come from? Actually, from the same place as Livni and Netanyahufrom Likud, "Lieberman was Netanvahu's chief of staff when Bibi was Prime Minister," a veteran Likudnik told me. "He and Tzipi were also very close." Lieberman left Netanyahu's staff, turning right, in the late 1990s; Livni turned left, joining Ariel Sharon's moderate Kadima party. But Livni made it clear that she would welcome Lieberman into a governing coalition if she won, which says something about the state of moderation in Israeli politics these days. In the hours after the election, it was assumed

by the media and most politicians that Lieberman's party would be asked to join any governing coalition, which says something about Israel's growing isolation from the rest of the world.

It will be much harder now for the U.S. to continue its unambiguous support if Israel's government prominently features a blatantly anti-Arab party. The ripples of Israel intolerance will reverberate through the Middle East. It will make cooperation with Israel more difficult for moderate neighbors like Egypt and Jordam, it would make reconciliation with Israel impossible for Sviria and Saudi Arabia.

There is an alternative, of course: a centrist coalition of Kadima, Likud and Labor. But that would require some real moderation and common sense, qualities overwhelmed by weariness and resentment in Israel's dour winter of victory.

PEOPLE TO BLAME

The good intentions, bad managers and greed behind the meltdown

ENGEANCE IS MINE, SAITH THE Lord, except that right now everyone wants a little piece of it. The mob has been chanting for months, ever since former Treasury Secretary Henry Paulson arrived in late September on Capitol Hill to warn of disaster, pass around his threepage plan and demand \$700 billion to fix the problem. Most members of Congress were so spooked they were ready to write a check, until their phone lines started melting with the angry voices of taxpayers demanding details about the likely return on the investment. But even the minimal strings attached did not prevent the first \$350 billion from vanishing, with the government overpaying about \$78 billion for the assets it bought. The banks told pesky reporters and congressional watchdogs that how they spent the bailout cash was really none of their business. And now, Tim Geithner informs us, the financial system needs \$2 trillion more.

The crowd has gotten crankier in the face of the brash indifference to its fury. It seems that the mighty have been hit with some virulent strain of arrogance common to those told that they are Too Big to Fail. First the auto executives swooped into town in their Gulfstream IVs to ask for \$25 billion;

then Merrill Lynch superman John Thain spent \$1,405 on a trash can and suggested he deserved a \$40 million bonus for losing \$15 billion in the fourth quarter. Even Tom Daschle, whose loval Senate brethren were set to confirm him to the Cabinet, discovered the radioactivity of the phrase "unpaid taxes on his chauffeured limousine."

The modern civilized state claims a monopoly on punishment. Mobs with pitchforks, vigilantism, frontier justice-all seem sweaty and coarse compared with the men in powdered wigs duly processing the law But as this crisis makes clear we are in a new frontier now, the financial badlands created by technology and globalization. with no maps and few rules, and the law has not caught up to us. Until it does, we are left with the old sanctions: symbols and shame. That still leaves the problem of knowing whom precisely to scorn. "Capitalism," John Maynard Keynes once argued, "is the astounding belief that the most wickedest of men will do the most wickedest of things for the greatest good of everyone." It is tempting to blame the whole political-industrial complex, starting with whoever first had the idea of lending \$750,000 to someone making \$17,000 a year; the regulators who said that was O.K. and the politicians who encouraged them:

the financial geniuses who rolled up all those mistakes into a big ball of bad loans. chopped them up and sold them; and above all, the presiding executives who got performance bonuses whether they performed or not-buying and selling things whose value they could not possibly know, finding ways to reduce risk that instead greatly increased it, unleashing on the markets what Warren Buffett called "financial weapons of mass destruction."

The problem with smashing the whole system, however, is that it's a lazy answer to a fierce challenge. Modern capitalism has created unprecedented wealth in our lifetime, shown its power to lift people out of poverty and spread a culture of competitive genius. So in the pages that follow, we make a case for who got us here, and who might have saved us and didn't Even faith itself can be faulted when it turns into blind optimism that sees no risk, hears no sirens. There are plenty of prosecutors who will have a chance to make their case against anyone who crossed a line. But there are also culprits who committed no crime, bankers and builders and prophets and Presidents, and the face in the mirror-since many of us in the mob now wish to punish those who gave us just what we asked for. -BY NANCY GIBBS

About the List

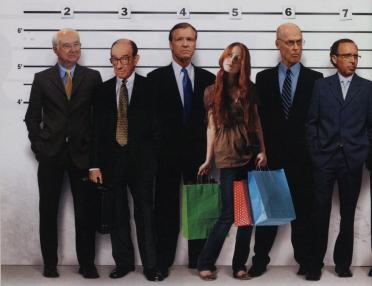
The venting of spleen is not a science—it's a joy. The following lineup was compiled and ranked by Massimo Calabresi, John Curran, Justin Fox, Stephen Gandel, Sean Gregory, Peter Gumbel, Barbara Kivital, Bill Saporito, Adam Smith and Josh Tyrangiel.

Photo-Illustration by TIME



The son of a butcher, Mozilo cofounded Countrywide in 1969 and built it into the largest mortgage lender in the U.S. Countrywide wasn't the first to offer exotic mortgages to iffy borrowers, but it popularized such products. In the wake of the housing bust, which toppled Countrywide, Mozilo's lavish pay package was excoriated by critics. He left Countrywide last summer after its sale to Bank of America, which later pledged to pay \$8.7 billion to settle predatory-lending charges filed against Countrywide by 11 state attorneys general.





Phil Gramm

As chairman of the Senate Banking Committee from 1995 through 2000, Gramm was Washington's outspoken champion of deregulation. And he got it, by playing a lead role in the writing and passage of the 1999 repeal of the Depression-era Glass-Steagall Act, which had separated commercial banks from Wall Street, Then he inserted a provision into the 2000 Commodity Futures Modernization Act that exempted derivatives like credit-default swaps from regulation.

Alan Greenspan

He was the one person who could have stopped it. As Federal Reserve chairman, Greenspan deftly managed the 1987 stock-market crash and presided over the 1990s economic boom, cementing his status as Washington's money wizard. But the low interest rates he sired in the early 2000s and his longstanding disdain for regulation underpinned the mortgage crisis. The maestro admitted in an October congressional hearing that he had "made a mistake in presuming" that financial firms could

regulate themselves.

Chris

The ex-SEC chief's blindness to repeated allegations of fraud in the Madoff scandal is mind-blowing, but It's his lax enforcement that lands him on this list. Cox says his agency lacked authority to limit the massive leveraging that led to the financial collapse. In truth, the SEC had plenty of power to rein in risky behavior by such investment banks as Lehman Brothers and Merrill Lynch, but it chose not to. Cox oversaw the dwindling SEC staff and a sharp drop in action against some traders. We could have

American Consumers

We really enjoyed living beyond our means. No wonder we wanted to believe it would never end. But the bill is due. Household debt in the U.S.—the money we owe as individualszoomed to more than 130% of income in 2007, up from about 60% in 1982. We've been borrowing. borrowing, borrowingliving off and believing in the wealth effect, first in stocks, which ended badly, then in real estate, which has ended even worse. Now we're out of bubbles. We have a lot less wealth-and a lot more effect.

Hank Paulson

When he left the top job at Goldman Sachs to become Treasury Secretary in 2006, Paulson's big concern was whether he'd have an impact. Careful what you wish for. He almost single-handedly ran economic policy for the last year of the Bush Administration, Impact? You bet. Positive? Not vet. Paulson was too late in battling the crisis, and letting Lehman fail was a pivotal. mistake that rapidly eroded confidence. His attempt to fix the problem-a bailout that netted \$700 billion from Congress-has

been a wasteful mess.

Joe Cassano

Before the meltdown, few people had ever heard of credit-default swaps. They are insurance contracts-or, if you prefer, wagers-that a company will pay its debt. As a founding member of AIG's financial-products unit, Cassano knew them cold. In good times, AlG's massive CDS-issuance business minted money by essentially writing insurance against a financial Katrina. What were the odds? Those contracts were at the heart of AIG's downfall. So far. the U.S. has invested and lent \$150 billion to keep AIG afloat.

used more.



lan McCarthy

As CEO of Beazer Homes since 1994, McCarthy has become something of a poster child for worst builder behaviors. In 2007 the Charlotte Observer highlighted Beazer's aggressive sales tactics, including lying about borrowers' qualifications to help them get loans. The company has admitted its mortgage unit violated regulationslike down-paymentassistance rules-at least as far back as 2000. It is cooperating with federal investigators.

Frank

Raines Raines was at the helm of Fannie Mae. the bastard offspring of politics and finance, when things really went off course. A former Clinton Administration Budget Director, Raines took over as CEO of Fannie in 1999. He left in 2004 with the company embroiled in an accounting scandal just as it was making big investments in the subprime mortgage securities that would later sour. Last vear Fannie and rival Freddie Mac became

wards of the state.

Kathleen Corbet

By slapping AAA seals of approval on even risky pools of loans, rating agencies helped lure investors into collateralized debt obligations (CDOs) that are now unsellable. Corbet ran the largest agency. Standard & Poor's. though Moody's and Fitch played by similar rules. These outfits are paid for their ratings by the hand issuer an anparent conflict of interest that has not gone unnoticed, despite the agencies' denials. As one S&P analyst wrote in an e-mail. "[A bond] could be structured

by cows and we would

rate it."

Dick Fuld

The Gorilla of Wall Street, as Fuld was known, steered Lehman deep into the business of subprime mortgages, bankrolling lenders across the country that were making convoluted loans to questionable borrowers, Lehman even made its own subprime loans. The firm took those loans, whipped them into bonds and passed on to investors billions of dollars of what is now toxic debt. For all this wealth destruction, Fuld raked in nearly \$500 million in compensation during his tenure as CEO. which ended when

Lehman did.

Marion and Herb Sandler

Herb Sandler In the early 1980s. the Sandlers' World Savings Bank became the first to sell a tricky home loan called the option ARM, And they pushed the mortgage, which offered several ways to back-load your loan and thereby reduce your early payments, with increasing zeal and misleading advertisements over the next two decades. The couple pocketed \$2.3 billion when they sold their bank to Wachovia in 2006. But losses on World Savings' loan portfolio led to the implosion of Wachovia, which was sold under duress late

last year to Wells Fargo.

Bill

He oversaw an era of great prosperity-and deregulation, Clinton ushered out the Glass-Steagall Act and signed the Commodity Futures Modernization Act, which exempted credit-default swaps from regulation. He also loosened housing rules, putting added pressure on banks to lend in low-income neighborhoods. None of it was an endorsement of permissive lending and risk-taking. But if you believe deregulation is to blame for our troubles, then Clinton earned a share too.



George W. Bush

From the start, the "ownership society's" No. 1 fan embraced deregulation and allowed federal oversight agencies to ease off on banks and mortgage brokers. True, he stumped for tighter controls over Fannie Mae and Freddie Mac and backed and signed the aggressively regulatory Sarbanes-Oxley Act after Enron blew up. But when SEC head William Donaldson tried to regulate hedge funds. he was blocked by Bush's advisers at the White House and quit. Plus, let's face it, the meltdown happened

Stan O'Neal

Merrill Lynch's CEO for nearly six years, ending in 2007, he guided the firm from its familiar turf-fee businesses like asset management-into the lucrative game of creating collateralized debt obligations, which were largely made up of subprime mortgage bonds. To provide a steady supply of the bondsthe raw pork for his booming sausage business-0'Neal allowed Merrill to load up on \$41 billion of them. As the subprime market unwound, Merrill went into crisis. and Bank of America swooped in to buy it.

Wen Jiabao

If cheap credit was the crack cocaine of this crisis-and it was-then China was one of our primary dealers. Wen leads a China that is now the U.S.'s largest creditor, holding some \$1.7 trillion in dollar-denominated debt. Its massive dollar holdings can be linked to determined efforts to control the value of the renminbi vs. the buck; China didn't want its currency to rise too rapidly against the dollar, in part because a cheap currency kept its export sector humming. And humming it was until U.S. demand cratered last fall.

David Lereah

When the chief economist at the National Association of Realtors, an industry trade group, tells you the housing market is going to keep on chugging forever, you apply the discount, But Lereah. who held the position through early 2007, did more than issue rosy forecasts. In his 2005 book, Are You Missing the Real Estate Boom?, and elsewhere, he regularly trumpeted the infallibility of housing. Lereah grew concerned about the market in 2006, but consider his January 2007 statement: "It appears we have established a hottom '

John

Devaney Hedge funds played an important role in the shift to sloppy mortgage lending, and Devaney was one of the cheerleaders. By buying up mortgage loans, Devaney and other hedgies earned fat returns for a while, which encouraged mortgage outfits to make ever sketchier loans. Devaney knew some of those products were ugly; in early 2007, referring to option ARMs, he told MONEY, "The consumer has to be an idiot to take on those loans, but it has been one of our best-performing

Bernie Madoff

His alleged Ponzi scheme could inflict \$50 billion in losses on society types, retirees and nonprofits. The bigger cost comes from the notion that Madoff pulled off an epic fraud right under the noses of regulators. Assuming it's all true, the banks and hedge funds that neglected due diligence were stupid and paid for it, while the "feeders" were reprehensibly greedy. But if in fact Madoff depantsed the regulators, exposing them as grossly incompetent, then this downturn is that much tougher to take.



Lew Ranieri

Meet the father of mortgage-backed bonds. In the late 1970s, the college dropout and Salomon trader coined the term securitization to name a tidy bit of financial alchemy in which loans were packaged and sold to institutional investors. It was a terrific idea, as it allowed banks to shed risk and make more loans. But as home ownership exploded in the early 2000s, the mortgage bond business inflated Wall Street's bottom

line. So the firms placed ever bigger bets on ever riskier varieties of these securities. You know the rest.

Burton Jablin

and other lifestyle channels, never made a subprime loan. But his shows pumped air into the real estate froth by teaching us how to extract value from our homes. Designed to Sell, House Hunters and My House Is Worth What? created addicted audiences. So did shows like Flip That House (TLC) and Flip This House (A&E). No one on these

shows ever seemed

the housing game a

and gusto.

to lose a dollar, giving

little too much glamour

The programming czar

at Scripps Networks,

which owns HGTV

Fred Goodwin

The face of overreaching bankers everywhere, Goodwin got greedy. More than 20 takeovers helped him transform the Royal Bank of Scotland (RBS) into a world beater after he assumed control in 2000. But he couldn't stop there. As the gloom gathered in 2007, Goodwin's mouth watered over a \$100 billion takeover of Dutch rival ABN Amro, stretching RBS's capital reserves to the limit. The result: the British government last fall pumped \$30 billion into the bank, which

expects 2008 losses

U.K. corporate history.

to be the biggest in

Sandy

Weill

Who decided banks had to be all things to all customers? Weill did. Starting with a low-end lender in Baltimore, he cobbled together the first great financial supermarket, Citigroup, Along the way. Weill's serial acquisitions (Travelers, Smith Barney, etc.) and persistent lobbying shattered Glass-Steagall, the law that limited banks' ambitions. Rivals followed Citi. The swollen banks are one of the nation's major economic problems. Solution? Back to banking. Citigroup is selling Smith Barney and other noncore

David Oddsson

In his two decades as Iceland's Prime Minister and then as central-bank governor, Oddsson made his tiny country an experiment in free-market economics by privatizing three main banks, floating the currency and fostering a golden age of entrepreneurship. When the market turned ... whoops! Iceland's economy is now a basket case. The three banks, which were massively leveraged, are in receivership, GDP could drop 10% this year, and the IMF stepped in after

than half its value.

Nice experiment.

Jimmy Cayne

No Wall Street CEO seemed more asleep at the switch than Bear Stearns' Cayne. He left the office by helicopter for long golf weekends. He was regularly out of town at bridge tournaments and reportedly smoking pot. (Cavne denies the weed allegation.) Back at the office, Cayne's charges bet the firm on risky home loans. Two of its highly leveraged hedge funds collapsed in mid-2007. That was the beginning, Eventually, Bear was sold for less than the value of its office building. "I didn't stop it. I didn't rein in the currency lost more the leverage," Cayne later told FORTUNE.

Let's Get Serious About Housing

Washington says it wants to help homeowners, but so far it hasn't. Here's what might actually work

BY BARBARA KIVIAT



A bet gone wrong Las Vegas has borne the brunt of the housing crash, with plummeting home values and a spike in foreclosures

ere's A THOUGHT: LET'S HAVE
the government do something
to fix the housing market. Now
what would that be?
Ideas are flying around
Washington. They include tax credits and

Washington. They include tax credits and cheaper mortgages for home buyers as well as leaning on lenders to rewrite mort gage terms for struggling borrowers. But maybe we should ask what, exactly, fixing the housing market means—and prepare ourselves for the limits of what these policies can actually accomplish.

Consider our recent track record. Last July, Congress passed a bill to help the housing market. In an effort to churn demand and stabilize home prices, the bill created a \$7,500 tax break for first-time home buyers. It also created a program to prevent foreclosures. Unfortunately, no major lenders signed up. Bottom line: only 25 loans have been rewritten.

Influencing a 510 trillion market that is coming off one of history's great asset bubbles is a lot harder than it looks. In December, houses sold for 15% less than they did ayear earlier. No act of Congress could change that. Says Wellesley College economist Karl Case: "Let's not delude ourselves into thinking we're driving a

Home Repairs

The housing market is broken. Here are some thoughts on how to fix it Home-buyer tax credits Incentives meant to lure potential buyers off the sidelines and to

buyers off the sidelines and to support home values Cheaper mortgages Another way to spark activity, which doubles as a stimulus for folks who refinance Loan modifications A different

tack, intended to make homes affordable to current owners by enticing lenders to rewrite loans **Cramdowns** Letting bankruptcy judges forgive mortgage principal speedboat when we're driving a tanker."
So, what does have a shot at working?

Most proposals on the table are designed to boost demand without distorting the market and at the same time restrain supply by keeping people in their homes. But the harsh reality is that fixing the crisis will require some acknowledgment that there are a number of people out there who shouldn't be homeowners. Here's a guide to the latest ideas about what to do:

Stimulate but Don't Manipulate

THE CORE ISSUE IS THAT THERE ARRY! enough people buying houses. Usually, when price goes down, demand rises, but in the housing market, falling values make potential buyers fearful, sending them to the sidelines as they wait to see how much cheaper homes will get. If we could restore buyers to the market, the thinking goes, prices would stabilize, delinquent borrowers could sell instead of falling into foreclosure, and the value of the mortgage-faeled securities contaminating our financial system would stop being such a mystery.

Ideas aimed at kick starting this process include giving everyone who buys ahouse a tax credit worth 10% of the purchase price and driving down mortgagerates—perhaps to as low as 4%. They're an effort to push fence sitters off their perch and give a head start to folks who are finding that tighter lending standards mean they can't borrow as much as they might once have

Such programs are great news for real estate agents and builders. But it's not clear how much these ideas would help housing overall. Nearly one-fifth of all borrowers owe more than their house is worth. They couldn't sell their home and pay off their loan even if they wanted to, and that's not a problem that goes away by simply slowing the pace of the fall.

At the same time, some houses are still overvalued. Economists disagree by how much, and the answer changes from region to region. Houses in Cleveland are undoubtedly cheap. They could use some new home buyers there. But if we're still not in the ballpark of normality overall-and certain market watchers think we might see prices drop an additional 10% to 15% nationally before this thing is over-then spending billions to spur on buyers won't be a magical fix. "To prop up prices above fundamentally justified levels is throwing good money after bad," says Joe Gyourko. professor of real estate and finance at the University of Pennsylvania's Wharton School. Overboosting homeownership helped get us into this mess, after all.

In some ways, proposals to stimulate

the housing market aren't really aimed at bringing in new buyers. Extending tax credits to people selling one home to buy another and letting homeowners use cheap mortgages to refinance won't get rid of excess housing inventory. These policies are meant to do something else-stimulate the economy by delivering money to homeowners. "We could tell everyone you can get a credit card at a rate of 6%, and that would put money in people's pockeds too," says Dean Baker, a co-director of the Center for Economic and Policy Research, Call this a housing mediated stimulus—but don't call it a housing market fix.

Figure Out Who Should Be Saved

THE OTHER CORE ISSUE IS THAT TOO MANY people can no longer afford their mortgage. Maybe they took out an adjustable rate loan that has reset higher, or they lost a job in the slowing economy. If we could stop the cycle of defaults and foreclosures, the thinking goes, we could prevent deeply discounted,

'Let's not delude ourselves into thinking we're driving a speedboat when we're driving a tanker.'

-KARL CASE, HOUSING ECONOMIST, WELLESLEY COLLEGE

bank-sold homes from flooding the market, keep losses from further impairing mortgage-backed securities and preserve property values. That's how we wind up with ideas like paying mortgage servicers to make loans more affordable and changing the bankrupty code to allow judges to reduce the amount borrowers owe their mortgage company.

Are there people who bit off more than they could chew and will never be able to afford their homes? Yes. "We need to recognize the goal is not to keep everyone in their houses for as long as possible," says Edward Glaeser, professor of economics at Harvard University.

But there are also plenty of people who might be able to keep their homes with a lower interest rate or a longer loan period. In many cases, this is in the best economic interest of the mortgage holder, since up to half of a house's value can be lost in foreclosure. And yet often—especially when the loan has been chopped up and dispersed to investors around the globe with a third-party servicer in charge of

collecting payments—that's not happening. "Servicers don't have the right incentives," says Christopher Mayer, professor of real estate at Columbia University's Business School. Cutting them a check in return for a modification of the loan, or trumpeting their legal authority to do so, is meant to prime the mortgage-rewriting pump, as is letting bankruptcy judges revise mortgages.

The tricky part is figuring out who will meet their modified payments and who will simply fall behind again. The relapse rate can be quite high, meaning that we'd be spending money only to delay the inevitable. Part of what drives up the redefault rate, though, are changes that don't lower. or may even increase, a borrower's monthly payments. A lender that re-amortizes missed payments over the life of the loan might see doing so as a compromise-but that doesn't mean the mortgage becomes more affordable. That's why the FDIC insists that modifications reduce payments at least 10% and take up no more than 38% of a borrower's gross income.

Again, though, let's not hail a solution as the solution. A targeted tool like loan modification is probably a more useful allocation of resources than a blanket policy like cheaper mortgages. Since half of all repossessed-home sales are in just four states (California, Michigan, Ohio and Florida), we can focuse fforts there.

Make Some Owners Renters

YET NO POLICY CAN CHANGE THE FACT that both property prices and homeownership rates went off the charts. It is natural for them to come down. "We brought in a class of buyers that shouldn't be in homes at all because they don't have the income," says Edward Leamer, professor of economics at UCLA. "We have to figure out what to do with these folks." There have been ideas on how to return owners to the rent rolls. Last year, for example, Arizona Congressman Raúl Grijalva proposed changing foreclosure rules to let homeowners petition a judge to let them remain where they are as renters for a defined period.

Now, maybe that's not the exact mechanism we want. But by and large, policymakers are reluctant to "take away" people's homes. And that's a problem in itself. Here we're up against macroeconomic forces bigger than we are. There's something to be said for trying to influence where housing is headed—but there may be greater benefit in understanding that it will be a long road to recovery. And the most effective thing we can do is make it less painful for people along the way.

The Power Of Two

Susan Collins and Olympia Snowe, Republicans from Maine, helped save Obama's stimulus from defeat. How they could make or break his agenda

BY KAREN TUMULTY AND JAY NEWTON-SMALL

The COURTSHIP OF SENATOR OLYMIA.

Snowe started in December with a phone call from Joe Biden. The Vice President-elect made sure Snowe had his home telephone number in Delaware so she would know how to reach him on weekends. In the weeks that followed, the two traded memos back and forth about how an economic-stimulus package should work. "I had an infinite number of ideas, because they had been stored up," says Snowe, a Maine Republican who never got that kind of treatment when her party controlled the White House. "Now somebod was listening."

Snowe isn't the only GOP Senator-or even the only one from Maine-who is getting room service from the other end of Pennsylvania Avenue. After working around the clock for a week with 20 of her Senate colleagues on a compromise stimulus measure, Susan Collins had all but given up. But early on the evening of Feb. 6, Senate majority leader Harry Reid invited her to his office. "I debated whether it was worth going," Collins recalls. "I figured they were just going to put pressure on us to accept their previous offer," which didn't shrink the spending in the package as much as she had demanded. When she got there, however, she was

Snowe and Collins are nearly the last survivors of a once common species of moderate Northeastern Republican surprised to discover White House chief of staff Rahm Emanuel, who had come to make a deal. "It was as if all of a sudden they had decided to get serious with the negotiations," she says. "They agreed on the bottom line of our proposal, which was \$780 billion."

In the weeks and months to come, Snowe and Collins can expect to be lavished with even more attention from the White House. Those two Maine modertase, plus Pennsylvania Republican Senator Arlen Specter, provided the margin that prevented Republicans from holding Barack Obama's stimulus package hostage to a filibuster. They also represent the sum total to date of Obama's claim of bipartisan support for his economic plans in Congress.

This is not the first time Collins and Snowe have broken ranks with their party. They have often found themselves at odds with the GOP leadership on taxes, budgets, the environment and social issues. They have both voted for stem cell research, against a constitutional ban on same sex marriage, for giving illegal immigrants a path to citizenship and against a ban on partial-birth abortion. They also both voted to acquit Bill Clinton after he was impeached in 1998.

But what makes Snowe and Collins more powerful now is that they, along with Specter, are nearly the last survivors of a once common species of moderate Northeastern Republican. As the GOP's center of gravity moves to the right, the Democratic majority has fewer and fewer potential crossovers to choose from. That gives each woman enormous leverage in a Senate Republican caucus whose leaders cannot afford any defections if they are to sustain a filibuster. Both sides know

that the math on any close vote is likely to come down to Snowe and Collins.

Which is just what their constituents in Maine like and expect from their Senators. The state has a tradition of flinty Yankee independence that dates back to another Republican Senator, Margaret Chase Smith, who in 1950 issued her famous Declaration of Conscience against McCarthyism-with Senator Joe McCarthy sitting only three seats behind her in the chamber. Maine doesn't bend easily to the prevailing political winds. Locals take a perverse pride in the fact that no other state has voted more consistently for the loser in modern presidential elections. And while they voted for Obama last fall and for the Democrat in every presidential election since 1988, Collins won her re-election race in 2008 with a margin 6 points larger than Obama's in Maine.

For all their similarities, the two women are not personally close and hail from very different backgrounds. Snowe, who turns 62 later this month, was orphaned at the age of 9 when her father, a Greek-immigrant cook, died of a heart attack a year after her mother died of cancer. Another tragedy brought her to elective office in 1973, when she filled the seat in Maine's house of representatives that was left vacant by the death of her husband in a car accident. Her second husband, John McKernan, was a colleague of hers in both the legislature and U.S. House: he later became Maine's governor. Snowe replaced George Mitchell when he retired from the Senate in 1994. Collins, 56, was one of six children in a politically

The senior Senator Elected to the Senate in 1994, Snowe has served in the U.S. House and both chambers of the Maine leaislature





The junior Senator Collins, 56, was elected in 1996 and now has seats on the coveted Appropriations and Armed Services panels

active family in Caribou, a town of 8,300 at the nation's northeastern tip, 15 miles (24 km) from Canada. Her father was a state senator; her mother, a mayor; and an uncle, a state supreme court justice. She learned her way around Capitol Hilli working as an aide to Senator William Cohen for 12 years. After losing a bid for governor in 294-she made a run for Cohen's seat when he left it in 1996. One of the things that thelped her win was the resemblance to the popular Snowe.

The two women share the quiet competitiveness that often exists between two Senators of the same state and party. Collins is more comfortable in front of television cameras than is Snowe, who often looks for a side staircase where she can sneak away from the klieg lights. Though they typically work in tandem for their state, they do so in very different ways, just as they have on the stimulus negotiations. Snowe, a senior member of the Finance Committee, worked on the tax provisions; Collins, recently named to the Appropriations Committee, focused on spending. Collins, who voted for the George W. Bush tax cuts, is a half-turn more conservative than senior Senator Snowe, who did not. Both women are accomplished fundraisers-and widely popular at home.

All this Down East independence does exactly thrill their colleagues on the GOP side of the Senate chamber. South Carolina Senator Lindesy Caraham noted that Collins' negotiaring skills helped turn an \$819 billion House bill into an \$836 billion version in the Senate. "I like them both," he told the New York Times, "but I wouldn't want them to buy me a car."

The White House is still wooing them. Obama has already met in the Oval Office with both. He will have to keep the courtship going if he hopes to match his success on the stimulus with measures to recapitalize the banking system and reform entitlements, energy and health care. On those issues, Snowe and Collins would tend to be supportive, but neither will go along automatically. Snowe, for one, thinks Obama could have done a better job of reaching out to House Republicans and making them as much a part of the negotiations in that chamber as they were in the Senate. "I'm sure he's learned from this one," says Snowe, Adds Collins: "The elections are over, and now the American people want us to solve problems and stop fighting. That's certainly my goal. I love legislating." That's good. She's going to be doing a lot of it.

TIME February 23, 2009

In his two years as Defense Secretary, Robert Gates has earned high marks for candor and common sense. But curbing the Pentagon's appetite for expensive new weapons could be his biggest challenge yet

BY MARK THOMPSON

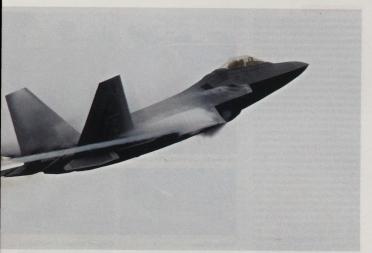


The reformer Gates, above, is about to enter a showdown with the Air Force over its F-22 fighter, top. He'll need all the skills he mastered as a CIA spymaster to prevail

F FOULARE A FIRM BELLEVER IN THE war in Afghanistan, Defense Secretary Robert Gates' grim assessment last month of what lies in store for the U.S. might have made you shudder. "If we set ourselves the objective of creating some sort of Central Asian Valhalla over there, we will lose, because nobody in the world has that kind of time, patience and money, to be honest," he said.

But if you are a defense contractor who has enjoyed a decade of bottomless Pentagon funding, it was Gates' comments about a struggle much closer to home that are keeping you up at night. "The spigot of defense spending that opened no yfr is closing," he said. "With two major campaigns ongoing, the economic crisis and resulting budget pressures will force hard choices on this department."

Gates, the U.S.'s 2 and Defense Secretary, has declared a low-key war against the military services and the way they develop and buy the weapons they use to defend the nation. Up until now, he has done that mostly by jawboning: The U.S. can't "eliminate national-security risks through higher defense budgets, to do everything and buy everything." Gates says in the latest issue of Foreim Affairs.



That futile quest has led to weapons that "have grown ever more baroque, have become ever more costly, are taking longer to build and are being fielded in ever dwindling quantities."

But his war of words is about to become very real. As he prepares a budget for next year, Gates must decide the fate of a number of fantastically expensive weapons programs the military services say they need. He can't fund them all—and might be wise to take a knife to them all. In this, Gates has little choice: the military's annual budget has finished growing, and the billions it once imagined it might spend on future weapons have evaporated. So cuts—and big ones—are coming, and Gates will be the man who makes them.

Though Gates was hired by George W.

Bush to clean up the mismanaged wars in Iraq and Afghanistan, Gates' greatest legacy may come in what he calls a "strategic reshaping" that better outfits the U.S. milliary to wage coming wars. Future weapons buys must "be driven more by the actual capabilities of potential adversaries," Gates told Congress a few weeks ago, "and less by what is technologically feasible given unlimited time and resources," Pentagon procurement, he said, is plagued by a "risk-averse culture, a litigious process, parochial interests, excessive and changing requirements, budget churn and instability and sometimes adversarial relationships within the Department of Defense."

Gates, 65, speaks with a flat Kansas twang that masks the edge he honed during a 26-year career at the CIA, where he was director during Bush 41's presidency. Following Bill Clinton's election in 1992, Gates left the capital for a lakeside home near Seattle, wrote a book and sat on corporate boards before moving to Texas, where he served at Texas A&M University for seven years, the last four as its president. "An obstinate bureaucracy can be a formidable antagonist," Gates said of the Pentagon in From the Shadows (1996). his memoir, "especially when giving up money is involved." Attempting to change the Pentagon has defeated nearly every one of Gates' predecessors. If he prevails, he will have done more to transform the Pentagon than anything his immediate predecessor, Donald Rumsfeld, a selfproclaimed king of transformation, was able to accomplish. "I have no intention," Gates said late last year, "of being a caretaker Secretary."

In the coming days, Gates will have to decide what to do about countless weapons programs. Here are the three that matter most.

The Air Force

GATES' FIRST SHOWDOWN LOOMS WITH a \$350 million-a-pop fighter jet. He has to decide by March 1 whether to add more F-22 Raptor fighters to the 183 purchased by the Bush Administration. For years, the Air Force has wanted to double the fleet, while Gates has made clear that he thinks 183 is sufficient. A month ago, some Air Force officials were saying privately that maybe 60 more F-22s would suffice. The Pentagon's acquisition boss. John Young, recently detailed why more F-22s might be a poor investment. The F-22s that exist are ready to fly only 62% of the time and haven't met most of their performance goals. "The airplane is proving very expensive to operate, not seeing the mission-capable rates we expected, and it's complex to maintain," Young said. Besides, he added, the Air Force plans on spending \$8 billion to upgrade most of the F-22s it already has.

Gates has tangled with the Air Force before. Shortly after arriving at the Pentagon in late 2006, he pushed to boost production of unmanned aircraft for use in intelligence work, only to run into the Air Force's long-standing love of manned fighters. But Gates' hunch was vindicated in Afghanistan and Iraq, where cheaper, unmanned Predator and Reaper drones have been flying around the clock but expensive F-22s have yet to appear. Air Force Major General Charles Dunlap Jr. has written that drones are "game-changing" because of their unprecedented ability to loiter for hours, waiting for the enemy to reveal himself-and then kill him with their weapons. And yet Dunlap's service remains wedded to white scarves, cockpits and all their inherent limitations.

Indeed, it is only a matter of time before combat pilots, like biplanes, become obsolete, Tail-mounted GPS kits have given even dumb bombs amazing accuracy once they are pushed out the door of a lumbering cargo plane. Missiles launched from ships or subs have further minimized the need for penetrating warplanes. Meanwhile, much of the Raptor's sky-high price-and that of accompanying jammer planes and rescue helicopters-is driven by the need to get the pilot into harm's way and then safely out. Even worse, while the Air Force wants more fighters from a bygone era, it has been underbuying the drones that will rule the skies in the future. Though the number of unmanned aircraft is soaring, it hasn't kept pace with the demand in Afghanistan and Iraq, where requirements for full-motion video are growing 300% annually. For every F-22 that isn't bought, the Air Force could add about a dozen desperately needed drones to its fleet.

The Navy

GATES HASN'T TORPEDOED ANYTHING THAT belongs to the Navy-yet. But its \$100 billion plan to buy a new fleet of 100,000-ton aircraft carriers (and the ships and subs to defend them) is a tempting target. That's a huge investment in gigantic ships that are increasingly vulnerable to long-range missiles-and even pirates or terrorists in a dinghy. At the heart of the debate is whether the Navy can make do with the 281 ships it has or needs to grow about 10%, to 313 ships. Gates has good reason to be skeptical. The Navy's "battle fleet is still larger than the next 13 navies combined," he recently noted. "And 11 of those 13 navies are U.S. allies or partners."

Carriers replaced battleships at the center of U.S. naval power in World War II, but they've been losing ground, offensively and defensively, for years. Until the 1980s, the offensive punch of smaller warships was limited to short-range guns. But now these ships pack Tomahawk cruise mis-



Overseas visit Gates tours Iraq in December. His attention is increasingly on Afghanistan



Losing Steam

The Nauy's newest carrier, the George H.W. Bush, use commissioned last month in Norfolk, Va., becoming the 10th and final ship of the Nimitz class. The Nauy wants to spend about 5100 billion on new Ford-class carriers. Naval analysts doubt for makes economic or milliary sense to invest so much in carriers when smaller vessels increasingly pack nearly as much punch



Clipped Wings

An F 22—by most accounts, the world's most advanced fighter aircraft—cook sour after a 10-hour flight from Hawaii to Japan last month. The Air Force has bought 183 F 223 and wonts more. But no F 22s have seen action yet in either Irvay or Afghanistan, and performance reports reveal that the \$350 million airplane is ready to fly just 62% of the time.

siles, giving every destroyer, cruiser and attack submarine the ability to destroy targets well beyond the reach of carrier-based planes-without risking pilots. Distributing that firepower across 120 warships instead of concentrating it on America's 11 carriers makes sense. Then there's the huge built-in cost of carriers. Much of a carrier group's firepower-accompanying ships and subs and the airplanes on its deck-is dedicated to protecting the flattop itself. "We need to move from a Navy of a few large carriers to a Navy of many smaller ships," says John Arquilla, a professor of defense analysis at the Navy's postgraduate school in Monterey, Calif. "The carriers ought to have their numbers painted over with bull's eves."

Two recent Pentagon-funded reports have questioned the Navy's carrier-centric strategy. The vessel's huge cost and halfcentury life span give potential foes like China a "static target" to threaten, a 2007 report said. A smarter option, the study suggests, is to build a Navy of many smaller and simpler ships, which would complicate enemy targeting and give U.S. commanders better intelligence. Nontheless, the Navy has just begun spending. 31 hillion to design and build the first in a new class of carriers, the U.S.S. Gendl R. Ford, scheduled to join the fleet in 2015.

The Army

GATES! FINAL TARGET IS ON LAND. THE Army is getting \$160 billion to outfit a third of its force with a complex network of electronically linked vehicles, beginning in 2015. This supposedly synchronized web of vehicles is called the Future Combat Systems (FCS) and would include tanks, troop carriers and unmanned air





Brave New Tube

The XM1203 is a self-propelled 155-mm howitzer designed to provide fire-power to soldiers as part of the Army's Future Combat Systems, a network of 14 ground and in whiches. Its two-person crew can hit targets spread across more than 1,200 sq. mi. G., 100 sq. km. But after two asymmetrical wars, is it a weapon the Army will need in the future.

craft ostensibly knit together in a computerized cavalry. The Army likes to argue that the FCS is a transformational approach to fighting wars, in part because it is giving up a lot of armor in favor of some 95 million lines of computer code designed to detect and avoid enemy fire. In theory, all this technology would give combat Gls the ability to destroy the enemy from far away.

That's the idea, anyway. In fact, there are serious questions about the FCS. Only two of its 44 key technologies are mature enough to generate reliable cost estimates, according to the Government Accountability Office. The Army has sopent 38 billion trying to get the FCS to work and plans on spending \$21 billion more before it gets a formal green light for production in 2013, when key performance tests still will not have been done. And the

FCS's vaunted mobility has already been scrapped; the Army has abandoned plans to transport all those vehicles to the battle-field aboard C-130 cargo planes because they are too heavy. Costs are on the rise as well: the Army was able to keep the FCS's total price tag at \$160 billion only by killing four of the program's 18 platforms in 2007—and is likely to continue cutting them to keep down the expense.

The bigger question is whether such a high-tech approach to war makes sense after the U.S. learned that getting soldiers out of their vehicles and mixing among the locals was a key to turning Iraq around. Weapons designed to kill from afar may not be best for counterinsurgencies, in which intelligence is most often gleaned only by personal contact, General Peter Chiarelli, the Army's No. 2 officer, disputes the idea that FCS "is a Cold War relic." But not everyone agrees. Retired Army officer Andrew Krepinevich Jr., who advises the Pentagon as president of the independent Center for Strategic and Budgetary Assessments, says the U.S. already can do from the air what the Army wants the FCS to do from the ground. Such redundancies, Gates says, are things the country can no longer afford.

TRIMMING ANY OF THESE SYSTEMS-MUCH less killing them-won't be easy. Gates is waging this war on two fronts. First, he knows he has to change a Defense Department culture that favors "99% exquisite solutions over a five- or six- or 10-year period" to a "75% solution in weeks or months." To help accomplish that, he is salting the military's senior ranks with officers who agree with him. He tapped General David Petraeus, whose counterinsurgency skills helped stabilize Iraq, to head an Army board asked to sift through colonels to identify those who merit promotion to one-star general. "An institution can always beat one or two people," Gates said recently, "but it's tough to beat four or five."

His second front, Congress, is, if anything, harder. During an appearance on Capitol Hill, lawmakers pushed him to declare their pet programs safe. Senator James Inhofe pressed Gates to protect the FCS program, whose high-tech cannon is built in Oklahoma, Inhofe's home state. "We have a nation where steel mills are shutting down," said Representative Gene Taylor, whose Mississippi district builds ships and who chairs the House Seapower Subcommittee and co-chairs the Congressional Shipbuilding Caucus. "I would ask you to encourage your acquisition folks to take advantage of these low prices." Shutting down the F-22 line means "the loss

of 95,000 jobs," warned Georgia Senator Saxby Chambliss, as did many others in his state. "If we truly want to stimulate the economy, there's no better place to do it than in defense spending." Last month nearly half the Congress sent letters to Barack Obama urging him to keep the F22 line humming.

To succeed. Gates will need backing from Obama, along with a plan to spend defense dollars more smartly, during the recession. Despite the protestations of lawmakers, defense spending is an inefficient way to create jobs because the skills that defense jobs demand require premium paychecks. (Civilians working on missile defense for Boeing in Arizona earn three times the state average, the company boasts-great for them, but not so good for taxpavers or the unemployed.) Gates has sent the White House \$10 billion in military projects to include in the stimulus package-barracks, hospitals, clinics, child-care centers-that can more quickly generate jobs. Any additional funds saved by killing off major programs could be diverted into less glamorous programs the military needs more: cargo and tanker aircraft, Stryker combat

'An obstinate bureaucracy can be a formidable antagonist ... when giving up money is involved.'

vehicles and small littoral ships designed for coastal warfare. Today's weapons can be radically improved with new electronics, engines and other components without having to build whole new ships, planes or tanks. The F-16's builder says the latest version of that warplane rolling off Lock-heed Martin's assembly line in Fort Worth, Fexas, yields' the most advanced multirole fighter available today. In fact, the hottest F-16 now in the skies is flown not by the U.S. Air Force but by the oil-rich United Arab Emirates.

Gates, tempered by his decades of seeing what US. intelligence could—and
could not—do, is leery of the buzzwords
and silver bullets that ricochet around the
Perlagon. Be modest about what military
force can accomplish and what technol
ogy can accomplish," he told an audience
of midcareer military and intelligence of
ficials last fall. War is "inevitably tragic,
inefficient and uncertain," he said. So is
taking on the Pentagon.



Talking and Listening to Iran

The Obama Administration wants a new relationship with Tehran. A look inside the country shows why that may be hard to achieve

BY ANDREW LEE BUTTERS/TEHRAN

Remembering A girl holds the Iranian flag at a celebration in memory of the founder of the Islamic republic



HERE'S NOTHING LIKE BEING surrounded by a crowd chanting "Death to America" on the day of the most historic U.S. presidential Inauguration in memory to make an American foreign correspondent feel homesick. The first day of my trip to Iran coincided with a new President's taking office in Washington and a demonstration at Tehran University in support of the Gaza Palestinians, Several thousand students gathered on campus and acted out a page from the standard Islamic Resistance playbook. "The blood in our veins is a gift to our leader," they chanted. "Israel will be destroyed, and Gaza is victorious." Later, part of the crowd reconvened at the former U.S. embassy—now known as the Den of Spies—and burned posters of George W. Bush and Barack Obama.

Doubtless much of the sound and fury was routine. As soon as it became known that Iranian President Mahmoud Ahmadinejad had canceld a scheduled appear ance, about half the crowd left. And in fact, many Iranians favor better relations with the U.S.—I met countless Iranians eager for more than just talk. "The walls should be torn down—from both sides!" a rank. and-file government supporter blurted out to me after the rally.

That message may be getting through. With the election of Obama, détente between Iran and the U.S. may be closer than at any time since the two countries severed diplomatic ties with the birth of the Islamic republic in 1979. Obama's foreign policy team views Tehran as both the source of and a possible solution to most of America's problems in the Middle East-from militants in Iraq, Lebanon and Gaza to what Washington believes is Tehran's secret nuclear-weapons program. At his first presidential press conference, Obama said that over many years, Iran's actions had been "unhelpful when it comes to promoting peace and prosperity." His national security team, however, was "looking at areas where we can have constructive dialogue, where we can directly engage" with Iran.

But the rhetoric of demonstrations in Tehran is worth listening to, Seven years after Bush's "Axis of Evil" speech, power is consolidated in the hands of hard-line anti-American conservatives, led by Ahmadineiad and supported by Iranian Supreme Leader Ayatullah Ali Khamenei. Together they have used the Bush Administration's opposition as an opportunity to crack down on reformists. Ahmadinejad initially greeted Obama's victory with a rare congratulatory letter, though his ardor then seemed to cool as he called on the U.S. to "halt your support to the uncultivated and rootless, forged, phony, killersof-women-and-children Zionists, and allow the Palestinian nation to determine its own destiny." But after Obama's press conference, Ahmadinejad said Iran was ready for "talks based on mutual respect and in a fair atmosphere."

The future of American-Iranian relations isn't up to Ahmadinejad alone, of course. Power in Iran is exercised by the elected presidency and parliament but overseen by less transparent clerical authorities headed by Khamenei. And with oil prices tumbling and the economy in poor shape, Ahmadinejad may face stiff competition in presidential elections this

'Who gives anyone a right to interfere with our lives? [Our nuclear program has] nothing to do with the U.S.'

—A WOMAN FROM AN ÉLITE BUSINESS FAMILY

year. Yet even if more moderate politicians like former President Mohammed Khatami come to power, anti-Americanism is so much a part of public life in Iran that the question remains. Is détente with the U.S. compatible with the legacy of the Islamic revolution?

Remembering Past Grievances

ONE RECENT SATURDAY, 30 YEARS TO THE day when Ayatullah Ruhollah Khomeini returned from exile in France, the Iranian government held a celebration in the massive shrine to Khomeini that is still under construction near the Tehran airport. The ceremony was a feel-good affair, with a marching band and schoolgirls in white chadors with pink butterfly wings. Speakers ranging from Khomeini's grandson to former President Ali Akbar Hashemi Rafsaniani celebrated the endurance of the world's only Islamic system of clerical and democratic rule. And each person who rose to the flower-strewn podium also used the occasion to take a swipe at the U.S., proclaim support for the Palestin-

ian cause, or both. Anti-Americanism is a potent political trope here because it is rooted in grievances. Just down the road from the Khomeini shrine is the Behesht-e Zahra martyrs' cemetery-one of many such scattered plots that contain the remains of more than 200,000 Iranian soldiers who died in the 1980-88 Iran-Iraq war. The widows and mothers who come here on Thursdays-the beginning of the weekend in Iran-to wash graves and pass out sweets and fruit to strangers remember that the rockets, jets and chemical weapons used to kill their sons and husbands were provided to Saddam Hussein by the U.S. and Europe. "Every strike against our country has come from the United States," says Azam Omrani, 63, whose son Amir died in the war. From the CIA-led coup in 1953 that reinstalled the Shah to the millions of dollars Washington spends on covert operations and propaganda against their government today, Iranians believe the U.S. has interfered in Iran's internal affairs. The

Iran's Many Faces. Some in Tehran are eager for more than just talk

Being careful

Women, below, know which dress codes they can tweak; artists and writers approach sensitive subjects obliquely

Sound and fury Students outside the

former U.S. embassy in Tehran prepare to burn a portrait of Obama, right, on Jan. 20

Feel-good affair

Schoolgirls in pink butterfly wings, far right, above, celebrate the 30th anniversary of Khomeini's return from exile

Together, yet apart

A curtain, far right, below, separates men and women who pray at a religious meeting place next to





effect has been to create a siege mentality even among those Iranians who don't support the government. "You go outside in the morning, and the first thing you read is that you may be bombarded," says a woman from an elite family, referring to rumors about U.S. or Israeli plans to bomb Iran's nuclear-development program, which the government missits is for civilian purposes. "What other country lives with this threat on a daily basis? [Our nuclear program has] nothing to do with the U.S."

Then there is U.S. support for Israel. Anti-Zionism is an ideological pillar of the Islamic revolution. One of the first things Khomeini did after the revolution, according to Salah Zawawi, the Palestinian ambassador to Iran for the past 27 years, was to raise the slogan "Today Iran, tomorrow Palestine!" Zawawi recounts how Khomeini declared Israel an unlawful country and named the last Friday of the holy month of Ramadan "Jerusalem Day" so Muslims could remember the occupation of the holy city and pray for its liberation." He was dealing with the cues-

tion of Palestine from a religious perspective," says Zawai." In the mind of Imam Khomeini, there is no compromise. You believe, or you don't believe? Lawawi says the clerical rulers of Iran today, as the inheritors of Khomeinism, are less likely to compromise on Israel than are members of Palestinian parties like Patah." All roads lead to Imam Khomeini," says Zawawi, a Fatah official who favors peace between Israel and the Palestinians. If the Americans expect the Iranians to stop their support of the Islamic Resistance (to Israel lin exchange for this or that, then they don't understand the Iranians."

Moderates from Iran's religious establishment say détente is still possible even without an Arab-Israeli settlement. The U.S. and Iran, says Mohammad Atrianfar, a newsmagazine editor and unofficial mouthpiece for the camp led by Rafsanjani, should set up a system of diplomacy much like that between the U.S. and the Soviet Union during the cold war, to prevent disagreements from turning into open conflict. The only thing we want from the United States is for them not to mess with our country," he says. But that would mean the U.S. accepting Iran's right to have a nonmilitary nuclear program, ending santcinos, apologizing for past misdeeds, shutting down covert operations and accepting Iran's right to support Hamas and Hizballah just as the U.S. supports Iran and Hizballah just as the U.S. supports Iran and Hizballah just as the U.S. supports Iran and Hizballah just as the wilder of the wilder of the wilder in the service is used to the service of the wilder of the service in the service is used to the service in the service in the service is used to the service in the service in the service in the service is used to the service in the service in

'The difference between Republicans and Democrats is like the difference between Pepsi and Coke.'

-BIJAN NOBAVEH, MP







negotiating with the U.S. is pointless because, in their view, all American politicians are beholden to the Israeli lobby. "The difference between Republicans and Democrats is like the difference between Pepsi and Coke," says Member of Parliament Bijan Nobaveh, who spent five years in New York City as a reporter for Iranian state television.

Staying Within Red Lines

THE KEY QUESTION IS WHETHER A RELIgious state with divinely guided leaders can change its core beliefs without alienating the ranks of the faithful-those who fought for the revolution, and the generation raised on its ideology-who keep the Islamic state in power. To be sure, Iran hardly feels like a revolutionary place. Some 70% of its population is under 30 and has grown up in a period of relative peace. Some have indeed grown tired of the constraints of living in the Islamic republic. "The younger generation sees the reality, and the discrepancy between that and what we were promised," says Masoud, a shoe merchant in Tehran's

Grand Bazaar. In contrast to other countries in the Middle East, there are relatively few soldiers and police visible on the streets of Tehran or huge portraits of the country's leaders. These are perhaps signs of confidence that however young and restless Iranians may be, they aren't a threat to the power structure. Disaffected Iranians either leave the country or concentrate on preserving their own pockets of freedom rather than struggle against the Islamic system. People know the red lines: women know the dress codes they can tweak; artists and writers self-censor or approach sensitive subjects obliquely. "We don't want another revolution. We don't want regime change," says the owner of a contemporary-art gallery in Tehran. "We are a gentle people."

That, Iranians may be. But such gentleness should not lead Western visitors to think support for the values of the islamic revolution has run its course. Every day the Mahestan shopping mall just off Revolution Street fills with students from the nearby universities. The mall is popular with Basijis—the young volun-

teers who fill the ranks of governmentsponsored demonstrations. When they grow up, they join the government and the Revolutionary Guards corps. The Mahestan mall sells mostly religious paraphernalia-Koranic software, recordings of religious chants, speeches from modern Islamic heroes like Khomeini, Ahmadineiad and Lebanese Hizballah leader Hassan Nasrallahthat constitute a kind of state-sponsored Islamic pop culture. Such a culture sustains the Basij movement, which is itself part of the way the government tries to channel a generation that grew up with no memory of the Shah into continued support for the revolution. "Basij is not an organization only-it's a spirit," says Mariam Saemi, 22, a student at Tehran University. "The purpose is to fight against oppression everywhere in the world. The reason we are against Zionism is that the Zionist regime oppresses people in Palestine, innocent kids and defenseless women. We will continue until we completely remove oppression."

Washington, take note.



An Oil Giant Dreams Green

The gulf emirate of Abu Dhabi got rich on the back of black gold, but its planned carbon-free city could represent the future of environmentalism

BY BRYAN WALSH/ABU DHABI

SAMI KHOREBU CAN'T STOP SMILING. THE baby-faced CEO of Environmena Power Systems, Khoreibi launched his business a little over a year ago. Now he is looking over a to-MW solaf arm in the desert out side the city of Abu Dhabi, with row after row of solar panels angled to the Middle Eastern sun like bathers lying poolside. The solar farm is the earliest tangible part of Abu Dhabi's Masdar City, a \$22 billion project designed to be the world's first zero-action-footprint, zero-waste settlement—the embodiment of this oil rich Arab City's surprisingly green dreams. "This is bring.

ing attention and capital from around the world to Abu Dhabi," says Khoreibi. "We're going to use this as a launching pad for clean development."

Abu Dhabi is the last place you might expect to find the future of environmentalism. The wealthy capital of the United Arab Emirates is the world's eighth biggest producer of petroleum. But the leaders of Abu Dhabi know—perhaps better than most—that the oil won't last forever, so they have embarked on the Masdar Initiative, amultibillion dollar push to establish the emirate as center for clean technology

development and innovation. Those plans include Masdar City, designed by British architect Norman Foster, as well as a \$250 million clean-tech investment fund and an energy-engineering school linked with the Massachusetts Institute of Technology. If it all works, this desert emirate could become the Saudi Arabia of renewable energy and a living model for the way technological innovation could defuse the threat of climate change. "This is really a very powerful image," says Rajendra Pachauri, chair of the Intergovernmental Panel on Climate Change. "It clearly shows that a country that has no immediate economic need to diversify its energy production is willing and able to do so.'

Abu Dhabi's leadership is all the more necessary at a moment when once vibrant green businesses are flagging, thanks in part to the plummeting price of oil. In the U.S. and Europe, new wind- and solar-power installations are slowing, energy start-ups are starving for funds and some green companies are laying off workers. But it's still full speed ahead in Abu Dhabi, where last month's World Future Energy Summit (WFES) attracted more than 16,000 visitors and companies that ranged from General Motors to modest Chinese solar manufacturers. And with a new

Solar power

These panels, left, will help offset the eneray used in the construction of Masdar City

Future vision

Norman Foster's plans, right, call for no carbon footprint. no autos and no waste stream



Trees and coolina towers-made from recycled steel-will keep Masdar from overheatina



Administration in Washington struggling to keep its own ambitious green agenda on track, Abu Dhabi kept the momentum going at WFES by announcing that at least 7% of its electricity would come from renewable sources by 2020, up from nothing today. Nor, said Masdar officials, would the recession have a major impact on the emirate's plans, announced last year, to invest \$15 billion in clean energy-an amount equal to what President Barack Obama has suggested spending annually for the entire U.S. "We are looking beyond the current financial crisis," says Sultan Ahmed Al Jaber, Masdar's CEO. "But all our projects are still proceeding.

factory, along with investments in wind

Those plans include a thin-film solar

it shows they are thinking ahead in a constructive way. I'm very optimistic this is happening. -NICHOLAS STERN, ECONOMIST

'[Masdar] is real, and

and solar and in carbon-trading projects throughout the world. Most significantly, Masdar is pioneering a model carbon capture and sequestration (CCS) project with the energy and mining giants BP and Rio Tinto that will take CO, emissions from industry in the emirate and store the CO, in abandoned oil wells. Since even the most optimistic energy projections assume we'll be burning fossil fuels for decades, perfecting CCS is vital to controlling emissionsand who would be better suited to cleaning up fossil fuels than an emirate that produces nearly 3 million bbl. of oil a day? "It's hugely significant that Masdar is championing this," says Vivienne Cox, BP's head of alternative energy.

But the heart of the initiative is Masdar City, a community designed for 40,000, set to be completed by 2016, that bills itself as the city of the future. Cars will be banned, so residents will be whisked around the city on a personal rapid transit (PRT) system, an automated cable-car-like network. (The PRT cars, unveiled at WFES, look as if they were stolen from the set of Star Trek.) More prosaically, the 2.3-sq.-mi. (6 sq km) walled community will have a solar-powered desalination plant, and conservation will keep water use 60% below the norm. The city's centerpiece will be the Masdar Institute, a graduate academy that will churn out new experts in clean energy. The hope is that a pool of educated workers-plus Masdar's favorable tax policies-will draw green companies to the desert, where they will be able to test their ideas in an environmental Utopia. "There is a visionary component to it," says Frank Mastiaux, CEO of climate and renewables for E.ON, a German energy company. "Masdar and Abu Dhabi have set themselves incredibly high expectations. Now they have to be delivered.'

For all the limitless funding Abu Dhabi can pour into Masdar, however, success is not guaranteed. Some urban-design experts question just how sustainable Masdar City will really be. The settlement is being built miles outside Abu Dhabi, contributing to the energy-intensive sprawl growing throughout the emirate. And while Masdar City promises to use the greenest technologies on the market, that won't make it livable. "It looks a bit like a prison to me," says Steffen Lehmann, an urban-design professor at the University of Newcastle in Australia who spoke at WFES. "It's going to be a 1% token-green enclave, while the rest of [Abu Dhabi] goes about business as usual."

And business as usual in Abu Dhabi is extremely carbon-intensive. Gasoline costs less than 50¢ a gal. (13¢ per L), and public transport is all but nonexistent. The World Wildlife Fund says the U.A.E. has the biggest per capita carbon footprint in the world, and parched Abu Dhabi uses more water per person than anywhere else. There are no plans to put a price on carbon, as even the U.S. is considering. Lehmann and others would prefer to see Masdar spend its billions greening Abu Dhabi itself, not building an entirely new settlement in vacant desert. "We have to have every city be an eco-city," Lehmann says.

He's right, but that doesn't diminish the significance of the Masdar Initiative and its high-tech approach. Environmentalists are slowly realizing that a policy of regulation-so successful in combatting past pollution problems like acid rainsimply won't be enough for global warming. The scale of the climate crisis is too vast, and the world's growth too rapid. What's needed is technological innovation, green solutions as vet undreamt of, to utterly remake the way people use energy. Masdar's crash greening may be the future. "This is real, and it shows that they are thinking ahead in a constructive way," says Nicholas Stern, an influential British economist and advocate for action on climate change. "I'm very optimistic that this is happening." Given the challenge, the world needs all the optimism it can get.

The Warlords **Of Afghanistan**

With the U.S.-backed government unable to maintain security, local strongmen are wielding more power than ever—and causing ordinary Afghans to lose faith in the West

BY ARYN BAKER/KABUL

IKE MANY MOTHERS IN AFGHANISTAN, Maghferat Samimi has affixed a photo of a child to her mobile phone. But the 21/2-year-old is not her daughter. She is a rape victim, one of scores that Samimi. a researcher with the Afghanistan Human Rights Organization, has documented in the country's northern provinces over the past year. Witnesses to the child's abduction by a local militia commander have had their rape claim backed up by a nearby hospital, but the district police chief maintains that the child fell on a stick. The chief's objectivity in the matter, however, is hardly assured, given that he once worked with the militia commander.

In Afghanistan today, it can be impossible to know whom to turn to for help. Seeking justice from government officials, says Samimi, "is like going to the wolves for help when the wolves have stolen your sheep." As the Obama Administration signals that it intends to devote more attention to the war in Afghanistan, many Afghans claim that in the name of fighting the Taliban, the West is ignoring abuses committed by its Afghan proxies. One of the worst offenders, alleges Samimi, is Abdul Rashid Dostum, an ethnic-Uzbek warlord who helped in the triumphant ousting of the Taliban in 2001, when, backed by U.S. special forces, he led hundreds of men on horseback to liberate the northern city of

'The government waited until [the

commanders committed more crimes. For this we ousted the Taliban?'

HUMAN-RIGHTS ACTIVIST

Mazar-i-Sharif. Dostum's militia is accused of that war's worst human-rights atrocity. in which hundreds of his captives suffocated to death after having been locked inside shipping containers. He denies the charges. Samimi is not concerned about Dostum's wartime activities-few if any of Afghanistan's leaders can boast clean hands after three decades of war. The problem, she says, is that the warlords and their militia commanders continue to commit crimes with impunity, protected by their alliances with foreign nations and comfortable positions within the Afghan government.

A Criminal State

THOUGH THEY HAVE LARGELY RELINquished their tanks and heavy artillery, several warlords have been able to maintain their core militias in the form of private security companies, political parties or loose business networks. Many derive their income from lucrative crossborder smuggling routes. Allegations of land grabs, rape, murder and kidnapping are common. Human Rights Watch and Afghan human-rights organizations like Samimi's have documented extortion rackets operated by former warlords and militia-run prisons where captives are held for ransom. Afghan journalists covering these crimes have been harassed by police or thrown in jail. In 2007, Samimi received a phone call from Dostum threatening to have her raped "by 100 men" if she continued investigating a rape case in which he was implicated. Dostum denies ever making such a threat, telling TIME that the rape allegation is "propaganda." And yet a witness to the phone call, military prosecutor General Habibullah Qasemi, was dismissed from his government post soon afterward, despite carrying a sheaf of glowing recommendation letters penned by U.S. military supervisors. The perception that warlords, protected by their in-



fluence and threats of violence, are not held accountable for their crimes has rocked Afghan society and fueled public discontent with the U.S.-backed Afghan government.

A former NATO official in Afghanistan compares the warlords to shrapnel lodged in an artery: Infection is a risk, he says, but pulling it out could be even worse. "There are so many other things we have to worry about, so why go and open this can of worms?" he asks. In some areas, tackling the militias can backfire. In the northeastern province of Badakhshan, local commander Nazir Mohammad runs the provincial capital, Faizabad, as one big protection racket. Foreign humanitarian organizations that don't hire his security services face attacks. When organizers at the German-run regional militaryassistance base attempted to dismiss his men because of a compelling accusation of murder, the base was firebombed; Taliban militants were blamed even though they are not known to operate in that area. Says a former prosecutor at the Attorney



The might of the militia General Abdul Rashid Dostum, an ethnic-Uzbek warlord, surrounded by bodyguards in Sheberahan in 2007

General's office: "Mohammad is such a powerful person in Badakhshan that he can cause many problems if his demands are not answerded-even rocket attacks and roadside bombs." Mohammad, whose militia provides security for NATO troops and aid organizations, denies threatening groups that don't hire his services. "Why should I do that?" he asks. "Know they are here to rebuild Afghanistan. I am just trying to find [my guys] jobs."

The Afghan government seems largely unwilling to curtail the power of the war-lords, whose wealth and influence have on-lords, whose wealth and influence have on-lords with the season of the season

of Dostum standing beside U.S. General Commy Franks. During a visit by Time, workmen were putting the final touches on an immense gold-painted crown that spans the compound's entry gate. The crown was modeled on that of the 14th century Central Asian military conqueror Tamerlane. The money to build the house, but the contract of the 14th Century Central Asian military conqueror Hamid Karzai, for whom he was military chief of staff. According to Dostum, Karzai pays him \$80,000 a month to serve as his emissary to the northern provinces. "I asked for a year up front in eash so that I could build my dream house," he says.

Karai, through a spokesman, has refused to comment on his association with Dostum. Nevertheless, he may see buying Dostum's loyalty as a worthwhile investment. A presidential election is scheduled for the fall, and waning support from Afghans and the international community alike means that Karzai is far from guaranteed another term. Dostum, with his influence in the north, could prove a necessary if unpleasant late.

Back Where We Started

THIS IS NOT THE FIRST TIME WARLORDS have held power in Afghanistan. After the 1989 withdrawal of Soviet troops, rival mujahedin groups that had united to drive out the foreigners turned on one another in a brutal civil war. The government collapsed, and militia commanders were able to seize territory and terrorize the population. The Taliban capitalized on widespread disgust with the warlords' savagery, coming to power in 1996. After Sept. 11, the U.S. relied on the northern warlords and their militias to help oust the Taliban. Many of those leaders were given prominent positions when the new Afghan government was formed, enabling them to claw back credibility that had been lost because of their behavior in the civil war

Samimi laments the squandered chance for Afghanistan to start over. "Right after the collapse of the Taliban, the government had the opportunity to go after these commanders because they were scared and weak," she says. "Instead, the international community and the government supported them and made them stronger. They didn't bring them to justice. They waited until they committed more crimes. For this we ousted the Taliban?"

Karzai has frequently lashed out at the international community for supporting the warlords, even as he too tries to keep them on his side. "The Afghan point of view is, Cut relations, stop backing them," he said in an interview last year. "Stop giving them contracts, stop arming them, and stop using them as political tools." Robust and public prosecution of their crimes would limit the warlords' power. The West would have to shoulder more of the security burden, but that may be un-avoidable if the U.S. still hopes to transform Afghanistan.

Educated moderates like Samimi have no love for the Taliban. But they have become disillusioned with the current government, in large part because of the unaddressed venality of militia commanders. Francesc Vendrell, the former European Union envoy to Afghanistan, holds that warlordism, as he calls it, is just as much at the root of the insurgency as religious ideology. "In Muslim society, justice is the most essential element, and here in Afghanistan, people simply don't see it exist. They see impunity, they see a few people become extremely wealthy, and they see cruelty," Vendrell says. "Therefore I think many of them are fence sitters. And you can't hope to win an insurgency when the civilians are sitting on the fence." - WITH REPORTING BY ALI SAFI/SHEBERGHAN

Clinton is headed to China. The inclusion of Beijing on her first trip overseas suggests that she and the new U.S. President intend to make the People's Republic of China a keystone in the arch of America's foreign relations. Paradoxically. Clinton will be aided by the fact that President Barack Obama has never been to Beijing, has previously said relatively little about China and is thus viewed there as something of a blank slate. Although that has caused anxiety among Chinese officials, it may also be a virtue.

Somehow, the "China question" managed to slumber largely undisturbed throughout the presidential election—which was probably just as well. It mean that Obama and Clinton could start thinking about China anew, without being encumbered by too many pre-existing political commitments.

Alas, it was into this unfilled void that the then unenthroned U.S. Secretary of the Treasury, Timothy Geithner, stumbled. In a written response to Senate questions, he suggested that China had been manipulating its currency. (Some in the U.S. have long alleged that by supposedly keeping its currency undervalued against the dollar, China gives its exporters an unfair advantage in American markets.) Since Geithner's was the new Administration's first real comment on relations with Beijing, Chinese leaders reacted as if a hostile shot had been fired across their bow. But Obama then called China's President Hu Jintao, evidently assuring him that the statement did not represent the spirit of future U.S. policy, and the incident passed.

Now is the time to ponder what the foundation of a new architecture for Sino-U.S. relations might look like. Co-dependence makes separation virtually impossible China's reaction to Geithner, however, gave a hint of the importance that Beijing attaches to relations with the U.S. and of how jumpy officials are about them. So be fore something else intrudes, now is the time to ponder what the foundation of a comprehensive new architecture for Sino-U.S. relations might look like

The reality is that the two countries have morphed into a state of codependence that makes separation virtually impossible. Because the Chinese are dependent on American consumers to buy their goods (the U.S.



had a \$246 billion trade deficit with China as of November 2008) and because the U.S. is dependent on China to fund its \$10.7 trillion debt, economics bind us indissolubly together. But we are also connected in one other way. Both the U.S. and China are rich in coal as an energy source and collectively produce upwards of 50% of the world's annual emission of greenhouse gases. Unless the two nations can find a way to collaborate in confronting the challenge of climate change, there can be no global solution to it. Why? Because a molecule of carbon dioxide emitted in Beijing or New York is now everyone's problem and will help derange climate patterns for all.

There is, however, a hopeful double paradox within this daunting challenge. For the first time in recent history, the U.S. and China find themselves with a demonstrably common interest. Equally

significant, as the self-confidence and influence of the U.S. waned under the Bush Administration, the Sino-U.S. playing field has become more level than ever before. When it comes to climate change, we are both sinners before the Lord. This istate of parity, however accidentally it may have been arrived at, presents a new psychological climate where the kind of equal partnership for which the Chineshave long vegarned seems possible.

So when Clinton goes to China, questions to do with climate change must be at the top of the agenda. For example:

Where can we cooperate on energy efficiency? Can the U.S. and China find ways to jointly profit from the development of low-carbon economies? Currencies, Tibet, human rights, Taiwan and other important questions should not be forgottlen. But a new united front to address climate issues would help bolster the larger edifice of Sino U.S. relations, making it easier to deal with these other contentious issues.

Even the most artful U.S.-China policy will never satisfy those in China who continually dwell on

past slights and grievances or alter the fact that we have very different and contradictory political systems. But a significant collaboration on climate change could go a long way to stabilizing the most important bilateral relationship in the world today, it would demonstrate the kind of leadership that has been missing from the U.S. of late and which the international community increasingly, and with good reason, expects from a rising China.

Sino-U.S. joint leadership on climate change would not only reassure the world that the challenge of global warming could be met. If done with diplomatic skill, it could also help create the basis for a new and very different kind of partnership between these two great nations.

Schell, a China scholar, is director of the Asia Society's Center on U.S.-China Relations

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A Glimmer of Hope in Africa

The war in eastern Congo has been the source of unspeakable horror, captured here by James Nachtwey's remarkable photographs. But there is a chance that change is coming

BY BEN AFFLECK

E PICTURE OF THE EASTERN REGION of the Democratic Republic of Congo has grown tragically familiar: a region with great natural wealth, riven by war, racked with hunger and traumatized by a long history of colonial abuse, postcolonial kleptocracy and plunder. In the past 10 years alone, millions have died here, and more die each day as a result of the conflict. Most die not from war wounds but from starvation or disease. A lack of infrastructure means there is little medical care in the cities and none in rural communities. so any infection can be a death sentence. The most vulnerable suffer the worst. One in five children in Congo will die before reaching the age of 5-and will do so out of sight of the world, in places that camera crews cannot reach, deep in a vast landscape and concealed under a canopy of bucolic jungle.

It is common in the West to read about African lives in grim statistical terms, so we've become inured to these huge numbers of deaths. Making matters worse, the conflict in Congo is often seen as a hopelessly byzantine African tribal war, encouraging the damning notion that nothing will ever change. This, of course, creates a sense of hopelessness-and nothing cuts down on humanitarian, foreign and development assistance so much as the jaded diminution of hope. The nation most in need of investment gets the least by the cruel logic that it is the most broken. It is a self-fulfilling prophecy that ultimately fosters indifference in the guise of wisdom.

That should not be the case in Congo. I've been traveling to Congo since



Rendezvous with the rebel Affleck, top, is patted down before he interviews Laurent Nkunda, above. At right, a mother and child wait for food in a camp

2007 to learn. Time has agreed to publish my amateur journalism on the merits of this urgent crisis and on my good luck with photographers, James Nachtwey, the world's finest war photographer, accompanied me on one of my trips, and his extraordinary work fills the following pages.

The warring parties in the east can be distilled into three main groups: the Congolese army; a breakaway faction composed mainly of Turiss, led by a former general, Laurent Nkunda; and an outlaw militia, the Democratic Liberation Forces of Rewanda (FDLR), led by the same Interahamwe Hutu extremists who committed the 1904 genocide of Tutsis in

neighboring Rwanda.

Of late, most of the world's focus has Laurent Kablid's army and Nkunda's forces. When I met Kunda, he made a compelling case for his rebellion, framing it as opposition to Kinshaas's cooperation with the génicidiaries of the FDIK and offering a moving history of the persecution of the Tusti. But like many militia leaders, Nkunda and his men have been accused of war crimes. I met a number of child soldiers who served in his militias, and his soldiers have been accused of participating in massacres in the villages of Bukavu and Kiwanga.

For its part, the FDLR has been present in eastern Congo for more than at years. Its members have committed many massacres of Tutsi civilians and have exploited the rich mineral resources of the region. The FDLR subjugates people either by rape (often performed

Photographs for TIME by James Nachtwey—VII

in groups—and on people of either gender) or with the AK-47, a wapon so ubiquitious that it has picked up a tragic moniker: the Congolese credit card. Mary, the scarred woman in the center of the photo collage on the next two pages, to the different page of the properties of the pr

In interviews with Congolese civilians living under FDLR control, I consistently heard one thing: they wanted the genocidairs out. But many believe the only lasting solution will be a military one—and no Western nation has shown much interest in shipping troops to central Africa.

It is Africans themselves who are finding a way forward.

There have long been accusations that Nkunda was sponsored and supported by President Paul Kagame of Rwanda. But last month something happened that seems to have ended that debate. Congo and Rwanda joined forces. Kagame's troops flushed out and arrested Nkunda, then helped facilitate a cease-fire with his forces in the National Congress for the Defense of the People (CNDP). Kabila's government in Kinshasa made a deal to protect the new CNDP leader, Bosco Ntaganda (who is wanted for war crimes), and joined Rwandan forces in fighting the FDLR. Their joint effort has been under way for several weeks, and to date, there have been no civilian deaths as a result.

Remarkable things are happening in eastern Congo. The Congolese army and the CNDP are working together to separate Hutu civilians from Interahamwe commanders, and already hundreds have been freed. According to one expert on the region: "For the first time, Rwandan and Congolese, Tutsi and Hutu are working together to begin the long road of ethnic reconfilation."

Hard choices remain. Will Nkunda, for example, be extradited from Rwanda? Kabila has promised that Rwandan troops will be out of Congo by March, but every day that they stay—and the thrill of Nkunda's capture recedes—it becomes more difficult politically for him to sustain his bold initiative. None of this will be easy.

But after innumerable failed, internationally brokered peace efforts, a quietly engineered, bilateral African solution has broken a stalemate. Now there is at least a chance of something better for eastern Congo. Says Kagame, who has lived through civil war, genocide and two wars in Congo: "I have never been more horeful than right now."

The Photo Montages

2	3	4	5	6
17				7
16		8		
15				9
14	13	12	11	10

Victims of the battle for the region's mineral wealth, PAGES 46 AND 47 Many Aminut, Januscal by tropsy, is treated in Goom. Amglerithe Rev 20 looms tall at the border with Uganda. Mothers care for their displaced children in camps and hospitals 6-36. Extracting fine grains of gold at a rime in Mongheuid. (6-9, 17) modes intense physical labor. Lake Kivu (10) separates Congo from Rowada and is at the geographical heart of the present conflict. At Bulleriog compl. 11-29, a displaced family registers for a supplemental feeding program, whose effectiveness is monitored by watching a child's weight; some at the camp (33 suffer from elephantiasis. Back at Mongheuidh, an assayer (14) weighs grains of gold, and miners (15) dig below the water table in their quest. Children sum in one such pit (10)

2	3	4	5	6
17				7
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15				9
14	13	12	11	10

The participants, PAGES 48 AND 49

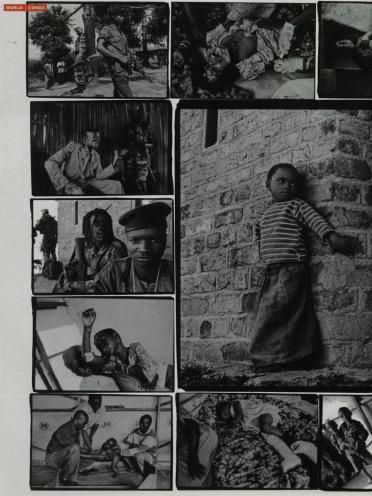
A young girl (1) warily watches a guerrille fighter in the Lubero district, where a rebel group meets with U.N. personnel. Outside, representatives from both parties stand guard (2). In Bunia, a displaced girl (3) with an infectious disease saffers in isolation; a young boy (4) finds out if the food in Bulengo camp helps him grow, another founly participates in the same feeding program (6); and adapt momenter tends to her sick children in Goma (5). In various meetings, Nicanda's Tutsi guerrillas remain aleri in Kichanga (7) while a U.N. representative talks with Hutu fighters in the Lubero district (8-10, 16). Meanwhile, displaced families find shelter in camps and hospitals in Goma and Bunia (11-15).

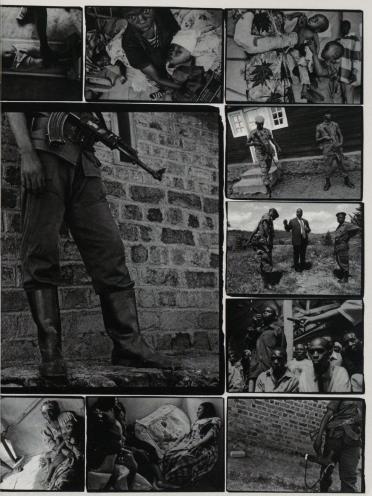
Nicanda makes are emphatic joint (14).

45









Evolving Darwin

He recognized how life-forms adapt and survive. But only today are scientists uncovering many of evolution's deepest secrets

BY CARL ZIMMER

AT DO HARRY POTTER, SHERLOCK Holmes, G.I. Joe and Charles Darwin have in common? They will all be coming to a movie theater near you this year. The only real person on that list will be played by Paul Bettany in the fall biopic Creation. And in true celebrity fashion, Darwin will be everywhere this year. In a convergence of anniversaries, Darwin would have turned 200 years old on Feb. 12, and his landmark book, On the Origin of Species, turns 150 on Nov. 24. There will be documentaries, lectures, conferences and museum exhibits. Darwin-themed blogs are being launched, and a cartload of Darwin-related books are being published. A replica of H.M.S. Beagle, the ship that carried Darwin around the world, will retrace his path. This January, Stanford University let a group of 90 people do likewise-albeit more comfortably, on a private Boeing 757.

It's only fitting to recognize the accomplishments of agreat biologist. But there's a risk to all this Darwimmania: some people may come away with a fundamental misunderstanding about the science of evolution. Once Darwim malled his manuscript of On the Origin of Species by Memos of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life to his publisher, the science of evolution did not grind to a



the patterns of nature. "You just can't even start to make sense of all this data without a framework of evolution," says Günter Wagner, an evolutionary biologist at Yale University.

Darwin proposed that natural selection could gradually transform a species. Scientists have observed thousands of cases of natural selection in action. They've documented that beaks of finches on the Galápagos Islands have gotten thicker when droughts forced the birds to crack tough seed to survive. They've observed bacteria develop resistance to drugs that were believed to be invinicible. Now biologists are applying DNA-sequencing technology to natural selection, which lets them identify the individual genetic changes that boost reproductive success.

As populations adapt to their surroundings, they can gradually evolve into new species. "We now have, I think, a good understanding of how new species arise—that is, how biological diversity is created," says Jerry Coyne, an evolutionary biologist at the University of Chicago and the author of the new book Why Evolution Is True. 'Darwin made little inroad into the problem, despite the title of his magnum orus.'

Biologists have also found plenty of evidence to support Darwin's other major claim: that different species share a common ancestry. Over the past 15 years, for example, paleontologists have found several fossils of whales with legs, linking modern whales to their terrestrial ancestors. Besides studying fossils, biologists can discover the genealogy of species by looking at their DNA. The fossil record points to hippos and other hoofed mammals as being the closest living relatives of whales. So does their DNA. Our own DNA contains clues to the bonds we share with the rest of life-it turns out, for instance, that we are closer kin to mushrooms than

to sunflowers. It's been 1.5 billion years or more since our ancestors split off from our fungal cousins. How did the genome of our ancestor change so that it could produce two-legged primates? One part of the answer is that mutations over time altered genes that encode proteins, and some of those changes have been favored by natural selection. But that does not mean that our genome-the sum total of our human DNA-is a finely tuned collection of protein-coding genes. In fact, a lot of mutations that all humans carry neither helped nor harmed our ancestors. They spread just by chance. And a lot of our genome is not made up of protein-coding genes. In fact, 98.8% of it is not. Some of

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that 98.8% consists of "pseudogenes" genes that once encoded proteins but no longer can because of a crippling mutation. They are the molecular equivalent of a vestigial tail, allowing us to see evolution's track.

Biologists are a long way from understanding the entire genome, but as threat getto know its parts better, they're getting a more precise comprehension of one of the most important features of evolution: how complex organs evolve. The notion how complex organs evolve. The notion that something as intricate as an eye could have evolved, Darwin wrote, "seems, I freely confess, absurd in the highest degree." But he argued that new complex organs could evolve through a series of intermediate forms.

Paleontologists can track some of life's transformations in fossils-observing how fins gradually evolved into feet, for example. But fins and feet and other complex structures are also encoded in DNA, and until the 1980s, biologists had almost no knowledge of the genes that built them. Over the past 25 years, biologists have identified many of the genes that help build embryos. A number of them help lay out the embryo's blueprint by letting cells know where they are. The cells absorb proteins floating around them, and the signals trigger the cells to make other proteins, which in turn clamp onto certain bits of DNA to switch neighboring genes on and off. This network of genes eventually leads a cell to give rise to an arm or a brain or a tongue.

These networks are so intricate that they probably put some limits on evolution's creative potential. Once a lineage of animals evolves networks for arms and legs, it's not easy for evolution to rewire the networks to produce, say, wheels. For one thing, many networks share some of the same genes. A change to a gene that improves one network may wreck another one. So for the most part, we're stuck with what evolution gave us.

Nevertheless, new traits have evolved. Once there were no brains, and now there are billions. Once you could search the entire world and never find a leaf. Now the world is green. Biologists are discovering some of the genetic secrets for evolving new traits. One is to recycle old genes.

Growing hair, for example, is a trait hat evolved only in mammals. One of the key proteins in our hair is known as alphakeratin. Not long ago, some Austrian and Italian researchers decided to search for alphakeratin genes in animals that lack hair. They found those genes in chickens and lizards—which belong to the closest living lineages to mammals. Lizards build alphakeratin in their claws. And it turns

Putting Evolution to The Test. How does Darwin hold up?



Darwin's microscope. His research, given the technology, was robust

DARWIN

TODAY

Species share a common ancestry, like branches on a tree Genetic studies confirm that different species have evolved from common ancestors. But DNA has also jumped from one species to another—turning parts of the tree of life into a web

Humans evolved from apes in Africa Evidence from DNA indicates that chimpanzees and bonobos are the closest living relatives to humans. Fossils document the course of human evolution in Africa from apelike ancestors over the past 7 million years

Natural selection is a powerful force driving evolution Natural selection's fingerprints can be detected in the human genome. But many mutations have spread thanks to pure chance (a process known as genetic drift)

Complex traits like eyes can evolve through a series of intermediate steps Fossils have documented some of those steps in structures such as limbs and ears. Studies on DNA have shown how genes for building old organs have been "borrowed" to help build new ones

out that mammals do as well. The research suggests that the hairless ancestors of today's mammals already had alpha-keratin that was used to build their claws; only later was alpha-keratin borrowed to help build hair.

Darwin had no way of knowing this, since he had no way of examining DNA. If he did, he might well have rethought one of his most potent metaphors for evolution: the tree of life. It's not that the metaphor is wrong. Scientists regularly reconstruct evolutionary branches today. When a new

disease breaks out, for example, the fastest way to figure out what to do is to determine what the pathogen is related to.

But there's more to the history of life than the branching of a tree. Every now and then, DNA moves between species. Viruses ferry genes from one host to another. Bacteria swap genes inside our bodies, evolving resistance to antibiotics in our own gut. Some z billion years ago, one of our single-celled ancestors took in an oxygen consuming bacterium. That microbe became the thousands of tiny sacs found in each of our cells today, known as mitochondria, that let us breathe oxygen. When genes move this way, it's as if two branches of the tree of life are being grafted together.

Biologists have documented a vast amount of gene-swapping among singlecelled organisms—which happen to make up most of the diversity of life on make up most of the diversity of life on Earth. There are 10,000 species of bacteria in a spoonful of dirt, twice as many species as all the mammals in the world. In the genes hopped from one species to another at some point in the history of life. In some ways, the history of life is indeed like at tree, sprouting new branches. But in some ways, it's also like a tapestry, emerging from a loom, its genetic threads woven together in new combinations.

In the mid-1900s, biologists succeeded in merging the newest biological developments at the time into a new vision of evolution known as the Modern Synthesis. Today a number of biologists argue that it's time for a new understanding of evolution, one that Pigliucci has called the Extended Evolutionary Synthesis. For now, they are firectly debating every aspect of that synthesis—how important gene-swapping is to the course of evolution, for instance, and how gene networks get rewired to produce new traits.

Some researchers argue that many patterns of nature—such as the large number of species in the tropics—cannot be reduced to the effect of natural selection on individuals. They may be following rules of their own. "Which of these ideas is going to actually survive and prove fruitful is anybody's guess? says Pigliucci." I don't see things coalescing for at least a decade or more."

Darwin predicted this. "We can dimly foresee that there will be a considerable revolution in natural history," he wrote at the end of *On the Origin of Species*. He saw his work not as the end of biology but as a beginning.

Zimmer is the author of the forthcoming book The Tangled Bank: An Introduction to Evolution

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State budget crises have forced schools to cut back—and students are paying the price

Where public

44%

Federal

State

school districts

get their funding

BY MATT VILLANO

ITH BOOKS TUCKED NEATLY ON the shelves and a comfy purple-dragon rug in a back-corner nook, the library at San Diego's Willard B. Hage Elementary School is the perfect place for children to fall in love with reading. Since the start of the school year, however, the library has been off-limits to students, who get to go there only when (already overwicked) teachers can escort them and ham-

dle the record-keeping. "With all of the cutbacks we've had in the last few years, the district can't pay for someone to help check out books," explains Pam Wiesenberg, a thirdgrade teacher at the school. "As a result, the children suffer."

As the national economy continues to nose-dive, agrow-ing number of public schools have found themselves facing similar situations—and making more and more painful cutbacks. Advanced Placement programs, extra help for English learners, art, musi

for English learners, art, music and summer school could be on the chopping block in many places. Ditto for efforts to reduce class size.

The gargantuan federal stimulus package should offer some relief to desperate adjustricts; the House and Senate are haggling over versions that include at least 86 billion for education programs, a significant bump up from the Education Department's 85 billion for effective for fiscal 2008. But there's a catch. a big chunk of the stimulus money that is designed to prevent massive teacher layoffs will be awarded only to states that spend at least as much on education as they did in 2006—a tall order given that a minimum of 42 states are facing significant of the stimulus minimum of 42 states are facing significant of the state of the s

cant budget gaps. At least 20 states have already cut their K-12 budgets.

Moreover, even with the federal stimulus money, school districts will still get the bulk of their funding from state and local coffers, which haven't been this low in decades. As Randall Moody, manager of federal advocacy for the National Education Association, says. When you have ao states with serious budget issues and that's

where schools get the bulk of their money, naturally there's going to be a problem."

Budget woes are perhaps most acute in California. The state, the most populous in the U.S., spends about 454 Billion a year on K-12 education, or nearly half its general fund, which receives revenue from a variety of sources, including income and sales taxes. This year, however, the double whammy of endless layoffs and an imploding real estate market has decimated the legislators mojectime as 2s bill expelsiators mojectime as 2s bill expelsiators mojectime as 2s bill.

fund, with legislators projecting a \$42 billion deficit by the middle of next year. To help bridge this gap, Governor Arnold

Schwarzenegger has proposed shorting schools 52n Billion during the rest of this academic year and \$3.1 Billion the next. He wants to save an additional \$1.1 billion by reducing the number of school days, from 180 to 175, Though the extra time of fingle cheer's tudents, California school superintendent Jack O'Connell strenuously opposes the move. Best sound bite: "To close the achievement gap and prepare all students for success in the competitive global economy, we should be offering more time in class, not less."

Despite Congress's holding emergency weekend sessions to push through a

stimulus plan, educators in many states alament the fact that schools wont see a penny of the extra money until at least July. According to O'Connell, some California's poorest districts are running out of cash for subsidized meal programs. The Hayward district is planning layoffs that would increase class size in primary grades from 20 students to 32. In Lake Elsinore, schools have turned off the lights in many rooms—and placed duct tape over the switches—to save money on electricity bills.

Terry Grier, superintendent of the San Diego Unified School District, says his district needs a cash influx now. "There are schools in our district that don't even have nurses on certain days," says Grier, whose district includes Hage Elementary School and its shuttered stacks. "If a kid skins his



HARD MATH

Minimum number

of states with midyear budget deficits

20

Minimum number of states in the red that have already made cuts in K-12 education

5

Number of school days California Governor Arnold Schwarzenegger wants to cut to save the state \$1.1 billion

SOURCE: CENTER ON BUDG

Getting squeezed In California, schools are cutting back on nurses, librarians and electricity—turning off the lights in many rooms and duct-taping over the switches

elbow, a teacher has to take time out of her lesson to dust him off, clean him up and put on a Band-Aid."

California isn't the only state grappling with steep K-2 budget cuts. In Florida, of ficials in overcrowded school districts are bracing themselves for likely staff cuts. Connecticut's board of education adopted a budget resolution in December that included an overall 10% reduction—a move that some fear means that pink slips for teachers are inevitable. "The biggest line items in most school budgets are staff and benefits," says Bob Brewer, an educa-

tion consultant in East Hartford, Conn. "No district can absorb those kinds of hits without trimming some of those bigticket items."

Even oil- and gas-rich states are panicking. In Alaska, for instance, sinking oil prices have some state legislators scrambling to lock in education budgets for the next few years as the state prepares to dip into its savings to cover a shortfall of approximately \$1.65 billion this year and up to \$3 billion next year. In Montana, which earned big bucks last year from its natural resources, education is funded primarily through property taxes, and many fear that the closing of mines and aluminum plants could trigger a mass exodus and redistribute the tax base, "It doesn't look good," says Eric Feaver, who heads the MEA-MFT, a union of teachers and state

employees. "People around here are starting to ask themselves what will happen if people leave."

Where will those families go? And whose school districts can afford to absorb their children? In California, school officials are expecting to receive upwards of \$8 billion over two years from the federal stimulus. While this money would enable districts to address some of their most pressing needs, John Mockler, an education-funding specialist in Sacramoto, asys, "Its not a panacea." In the long term, Mockler says, states need to come up with new funding sources to support classroom instruction and let teachers do what they were hired to do—teach.

In the meantime, some school-district administrators have come up with creative solutions. Superintendent Jerry Vaughn of the Floydada Independent School District in Texas—which has 900 or so students—says he is working toward a partnership with a local wind-power company that would pay for a laptop for every kid in grades 6 through 12. At the fast-growing Forsyth County Schools District in Cumming, Ga., Bailey Mitchell, chief technology and information officer, recently opted to use free open-source software instead of purchasing expensive software licenses from vendors like Microsoft. Mitchell says the decision will save \$1.1 million over three years, "We sat back and recognized the money we needed simply wasn't going to materialize out of thin air," he says.

Back in San Diego, at Hage Elementary, teachers desperate for help in the school library are recruiting parent volunteers to staff the facility a few days each week. Juli Finney, president of the school's Parent-Teacher Association, admits that while this solution isn't ideal, it is precisely the kind of effort she and other parents must make to ensure that state budget cuts don't deny their children the chance to experience the thousands of books that are now quite literally behind closed doors, "Technically, the PTA is supposed to put icing on the cake and not provide the cake itself," she says. But when times are tough, some cake is better than no cake at all.

TIME February 23, 2009

Viewing Outside The Box

When TV moves from your living room to your laptop and your phone, how does it change? A critic's look at the big (and little) picture

BY JAMES PONIEWOZIK

HE DAY AFTER THANKSGIVTIKO, my TWO died Because it doubles as my cable box, this meant that for the week it took to get a replacement, my TV was dead as well. This would be a tracing circumstance for most Americans. But for a TV critic, it was a blow to my livelihood. I was like a cotton farmer after a weevil infestation. I was cut off from the main pipeline of American medial live.

Or I would have been, a couple of years ago. Now, however, my situation offered a learning experience in TV-free TV. I had no cable, but I had DSL and a houseful of gizmos with screens: desktop, laptop, cell phone. Could I make do with them?

Plenty of my countrymen do. Through necessity, I was entering a club more viewers are joining by choice the posttelevision society. Some download TV to avoid ads. Some Netflix series so they can watch them in one big marathon. Some like the convenience, some the portability. Some are cutting their cable or satellite bills to asser money in hard times. Millions of others use online video as a backup—Huluing dramas they missed live, watching March Madness on CBSSports.com or Wimbledon on SESNedo. Preferably at work.)

The business implications of all this are huge. Who will get paid for the TV of the future? (With online piracy rampant, will

anyone get paid at all?) How do you replace TV-commercial revenue? And how do you measure a hit when more and more of the audience is watching on computers, on DVD players, via video-game consoles or on the screen of the bike at the gym?

These are all important questions. But not for me. Mine were Could I satisfactorily watch TV without a box? How would itchange my experience? And more broadly, now that TV (the medium) is divorced from the television (the machine), now that video is a portable as a Grisham paperback, now that big-budget series can be blog embedded and e-mailed just like your You'lube video of your cat falling asleep—what are we even talking about when we talk about TV?

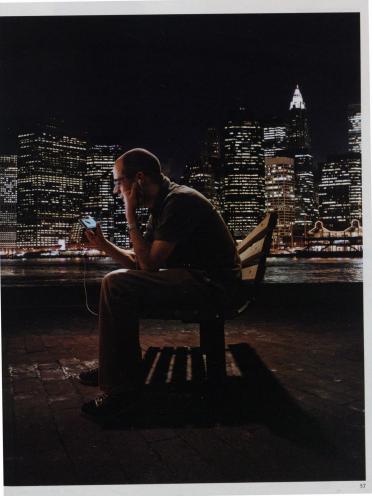
My TV Is Dead. Long Live TV!

FIRST HURDLE FIRST: ONLINE VIDEO HAS gotten much better since the days of watching a jerky postage stamp over the din of your hard drive whirring like an espresso

'Watching TV' used to mean having the same experience as millions of others. Not anymore grinder. While my plasma monolith sat mute, I watched 90 Rock in high-quality video on my laptop through Hulu.com. My libnon doubled as a wireless video device. (My kids were already using it to sample VouTube's vast library of homemade Lego Star Wars animations.) By downloading free apps like loost and Turuce, I colud use its brilliambly lit display—a munchkin plasma screen—to watch last night's Daily Show and Gilmore Giffs rerus. Much of what I couldn't get free, I could buy from Titunes and carry with me. I watched Terminator The Sarah Commor Chronicles

Some things were unavailable—quit being stingy with the Top Chef, Bravol but what I lost in choice I made up for in serendipity. I downloaded video podcastion from Cook's Illustrated, watched Rob Corddry's Web comedy Children's Hospital and rediscovered the cult comedy Srangers with Candy (with a pre–Daily Show Stephen Colbert) because it turned up randomly through the Joost app on my iPhone.

As for live TV. I learned that cell-phone companies are glad to provide it. I test-drove the Flo TV service—one of several cell-TV options—on an AT&T LG phone, complete with a tiny retractable antenna that made it look like something you'd see in Couch Potato Barbie's living room. I set the tiny screen on a kitchen shelf and



watched MTV as I peeled carrots. I tuned it to Morning Joe and balanced it inside my medicine cabinet, discovering an exciting new way to cut myself while shaving. So long as I had a signal and battery Juice, I could go shopping, take the bus or go to a kids' soccer game and never, God help me, be out of reach of Wolf Biltzen.

Was it possible to replace TV? Sure. (The real question is how to get away from it.) And that may change TV as a cultural force.

For a good half-century, "watching Yv" meant one thing. It was something you did at home, with friends or family, in front of a stationary machine in a dedicated room, preferably with snack chips. You experienced a broadcast exactly when and how millions of others did—same Battime, same Bat-channel—or you did not experience it at all. And unless you got proactive with a VCR, you did not copy, carry or remix what you saw. This was why mass media were culturally unifying (or homogenizing): those moments that mattered, we all saw in exactly the same wax.

Not anymore. Today TV broadcasts are just starting points, raw material to be curated in a collective online canon. During the election, I was immersed in political news and comedy, but I saw only a fraction of this material-interviews, skits, Joe the Plumber encounters-on a television. I saw bits embedded on blogs and on YouTube. I saw them straight up, or edited and surrounded by comments. If I saw the Katie Couric interview with Sarah Palin on the liberal website Talking Points Memo and you saw it on the conservative Townhall.com, did we really see the same program as each other-or as the shrinking number of viewers who still watch the 6:30 news?

More people watched Tina Fey's takedown of Palin online than on Saturday Night Line. And well they should. Why sit through 90 minutes waiting for the good bits when an army of online editors will separate the wit from the chaft? This isn't just a knock on SNL. The View, the nightly news—they're all albums, which the Web breaks down into singles.

That brings us to a truism about online video: it rewards brewity and scatters attention. That's true to an extent. Five to seven minutes seem to be the sweet spot for a webisode; "Baby Panda Sneezes" loses its magic after about 11 seconds. But a funny thing happened in my cable free week: I found myself paying doser attention to the TV shows I watched online.

Here's the important physical fact that separates online from off-line TV: you're holding something. Watching old-school TV, you flop on the couch and let the medium wash over you. New school, you hold a screen in your hand, balance a laptop or



I'LL TAKE THESE TO GO
SATURDAY NIGHT LIVE No more
waiting 90 minutes for the good
stuff; bite-size comedy skits are a
natural for the tiny screen

ARRESTED DEVELOPMENT One of the numerous brilliant-but-canceled classics that live on online (in this case, through Hulu)

FRINGE Fox's creepy-science series, like a good horror paperback, is perfect for curling up with on the laptop. Alone. In the dark

sit at a desk. There's a small but constant effort, the tiniest bit of physical feedback.

This makes me a much more impatient viewer. If a video doesn't grab me immediately, I kill it. But when a show does engage me, the connection is deeper. The wide-screen image is a foot or two from my face, filling my field of vision. The connection istactile and intimate. (Coincidentally, I'm told the Internet is also a popular medium for porn.) As you lean in, focusing physically and mentally on, say, an episode of *The Wire*, watching becomes something more like reading.

I apologize to all the English teachers to whom I have just given aneurysms. But the watching as reading analogy is true in more ways than one. Whereas channelsurfing is like turning on a faucet, finding a show online is more like rummaging through a new-and-used bookstore, where House is shelved next to Hill Street Blues.

Like reading, viewing online TV is more solitary, You don't gather the family around your MacBook to watch the Super Bowl. Yet in some ways it's more social. There's no online-video TV Guida't to rely on—though some start-ups, like e'Guiders.com, are trying to create one—so your social connections become your TV guide. And the same interactivity that enhances regular TV-watching is even more immediate with laptop in hand. When I watch Lost, I rush to write a blog post—not so much to get my

thoughts out as to see the comments fill and find out what other people thought. When the show is over, it's just begun.

Big Screen, Little Screen

DOES THIS MEAN I'M READY TO ABANDON that video altar in my living room? Oh, God, no. When my TiVo box was finally replaced, I ran back to my big-screen TV like a child reunited with his mother. (Not as fast as my kids, who quickly began TiVoing a new stash of Clone Wars enisodes.)

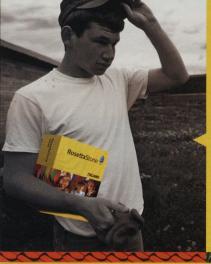
But what we once called the "small screen" is fading away. We'll have tiny screen and giant screens only dinne devices and ever cheaper flat-screen video walls. To me, lush cinematic shows like Big Love and Mad Men need a big canvas for others, it's football that demands the real estate. Some shows are more interchangeable. I was not surprised to find that MTV's The HIBs, with its sleek visuals and forgettable dialogue, is perfectly suited to the bauble-like screen of the iPhone.

So some shows will be big and grand for the giant screen. Other shows, like Comedy Central's on- and off-line hits, will thrive on both platforms. Producers will start conceiving series both as whole entities and repurposable parts—like the Jan. 31 SNL skit involving Pepsi that ran the next night as a Super Bowl ad for Pepsi.

Media messages will be tailored both ways: already. President Obama is doing network TV to broadcast messages wide, and online videos for a more intimate, fireside-chat connection. And as more people watch traditional TV on the tiny screen and online video on the big one, more will jump the boundaries. Collegehumor.com just debuted a show on MTV, while this spring ABC premieres In the Motherhood, a sitcom based on a webisode series.

All this may change traditional TV, but the tiny screen could also revive genres. For a decade, sitcoms have struggled on big networks. But online, few offerings do as well as humor. Be it funnyordie.com or the faux Japanese talk series Gorgeous Tiny Chicken Machine Shou, people want the tiny screen to make them laugh.

Some would argue that that's a matter of scale—that it's impossible to be moved by something in a 4-in. (to cm) video window. I'm not so sure. Hunched over my tiny screens lately. I've found myself riveted by Battlestar Galactica, provoked by a YouTube animation about the credit crisis and verklempt over an old video I posted of my son blowing bubbles in the bath tub. Big screen and tiny may have their differences, but where there's engagement, there's emotion. The screen that matters most is still the one where the story lingers and replays, inside your head.



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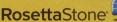
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Breast cancer is a global crisis. Once regarded as a disease of the wealthy West, it is now the most common form of cancer for women across the world. This year alone, more than 1.1 million new cases will be diagnosed (up from 500,000 in 1975) and 411,000 patients will die from the disease.

Surprisingly, that soaring caseload is largely a consequence of successful public health campaigns. Thanks to better healthcare, sanitation and food provision, an ever-growing number of women across the world are living to 50-plus—an age when they're more susceptible to breast cancer.

The threat of breast cancer may be growing, but so is our understanding of how to tackle the disease, Today 85% of stiffers in the developed world make a successful recovery. That's party due to advances in treatment, but also a result of the mass screening programs implemented by many. Western nations, in the U.K., women aged 50 to 70 are encouraged to attend a free breast check—which moles an X-ray or mammogram—every three years. This process can reveal tumors at a pre-clinical stage, when they are too small to be 6th to the resulted or pre-clinical stage.

With early diagnosis and treatment, survival rates soar. The World Health Organization estimates that regular screening reduces breast cancer mortality by up to 45% while the UKS National Health Service says that its program saves 1,400 lives each year. Developing countries like China—where urban areas have seen a 20-30% rise in breast cancer in the past decade—are now starting their own screening schemes.

But tumors hidden by dense breast tissue, for example, can be difficult to detect or assess with ordinary screening techniques. However, new technologies are helping clinicians make earlier diagnoses in more patients. Philips, for instance,



- *Breast cancer causes 1.6% of all female deaths worldwide
- *More than 55% of breast-cancer-related deaths occur in low- and middle-income countries.
- *Regular screening can reduce breast cancer mortality by up to 45% Source-WHO





 Philips MammoDiagnost VU mammography workstation; 2. Colored mammogram showing malignant tumor of the breast; 3. Light micrograph of malignant cancer cells from a sample f human breast assue.

has developed the iU22 Ultrasound. This system's advanced volume breast imaging and tissue aberration correction technology provide cleare images of dense and fatty breast tissue. According to the American Cancer Society, a breast MRI is often recommended to screen dense breasts or high-risk patients due to its high specificity and sensitivity.

Philips is also conscious of the need to make women comfortable during the sometimes-stressful screening process. Normally, patients enter MRI scanners head first, which can cause feelings of claustrophobia. But Philips' Elite Breast MRI Clinical Solution reduces anxiety by scanning patients feet first.

In some countries, the war on breast cancer cannot be successfully waged with move technology and screening programs alone Many Middle Eastern women, for instance, are unwilling to let a doctor—male or female—examine their breasts. Others are afraid that the disease will bring share on their family. This staff consequences. Around 70% of breast-cancer case in Saudi Arabia and Jordan are diagnosed in the less-treatable late stages of the disease, compared to 30% in the U.S.

Samia al-Amoudi, a Saudi Arabian obsterician and genecologist diagnosed with the disease in 2006, is helping to change breast cancer's stabos status. In a weekly neverpaper column, she chronicled her struggle with the disease, detailing how she discovered her tumor and discussed the disease with her husband and familiy. Al-Amoudi believes that Mulsian women lawe a religious duty to care for their bodies: "In Islam, we are asked to go and seek medical advice and to go and seek treatment."

For women across the world, that simple message of breast cancer awareness could be a lifesaver.

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HOW FAITH

CAN HEAL

The Biology Of Belief 62

Faith And Science: A Forum Healing Rituals Around The World

A User's Guide 84

SPEAK UP
More than 85% of
cancer patients would
not be offended if their
doctors asked them
about their spiritual
needs—but doctors

The Biology Of Belief

Science and religion argue all the time, but they increasingly agree on one thing: a little spirituality may be very good for your health

BY JEFFREY KLUGER

OST FOLKS PROBABLY couldn't locate their parietal lobe with a map and a compass. For the record, it's at the top of your head—aft of the frontal lobe, fore of the occipital lobe, north of the temporal lobe. What makes the parietal lobe special is not where it lives but what it does—particularly concerning matters of faith.

If you've ever prayed so hard that you've lost all sense of a larger world out-side yourself, that's your parietal lobe at work. If you've ever meditated so deeply that you'd swear the very boundaries of your body had dissolved, that's your parietal too. There are other regions responsible for making your brain the spiritual amusement park it can be yout thalamus plays a role, as do your frontal lobes. But it's your parietal lobe—a central mass of tissue that processes sensory input—that may have the most transporting effect.

Needy creatures that we are, we put the brain's spiritual centers to use all the time. We pray for peace; we meditate for serenity; we chant for wealth. We travel to Lourdes in search of a miracle; we go to Mecca to show our devotion; we eat hallucinogenic mushrooms to attain transcendent vision and gather in church basements to achieve its sober opposite. But there is nothing we pray—or chant or meditate—for more than health.

Health, by definition, is the sine qua non of everything else. If you're dead, serenity is academic. So we convince ourselves that while our medicine is strong and our doctors are wise, our prayers may heal us too.

Here's what's surprising: a growing body of scientific evidence suggests that faith may indeed bring us health. People who attend religious services do have a lower risk of dying in any one year than people who don't attend. People who believe in a lowing God fare better after a diagnosis of illness than people who believe in a punitive God. No less a killer than AIDS will back off at least a bit when it's hit with a double-barreled blast of belief. "Even accounting for medications," says Dr. Gail Ironson, a professor of psychiatry and psychology at the University of Miami who studies HIV and religious belief, "spirituality predicts for better disease control."

It's hard not to be impressed by findings like that, but a skeptic will say there's nothing remarkable—much less spiritual—about them. You live longer if you go to church because you're there for the cholesterol-screening drive and the visiting-nurse service. Your viral load goes down when you include spirituality in your fight against HIV because your levels



ABOUT THE ART

Artist Christian Northeast trolls the internet scavenging prayers left on blogs, in chat rooms and on message boards. He illustrated some of them for his new book, Prayer Requested, to be published in June by Drawn & Quarterly



LET US ALL



JOIN HANDS





AT (HING OVER US









POWER OF HUNGER Food restriction can lead to feelings of clarity and bliss—good for a religious faster, bad for an angrexic

82% Blacks who say they are church members 92% Blacks who say religion is very important in their lives

55% Whites who say the same



94%

Share of patients who said it was perfectly all right for doctors to ask them about their religious beliefs. Plenty of doctors have no quarrel with this—though they are less sure how to raise the topic. Still, they agree that if health-care providers suggest complementary care like acupuncture to some patients, why not faith and prayer to others?

of cortisol—a stress hormone—go down first. "Science doesn't deal in supernatural explanations," says Richard Sloan, professor of behavioral medicine at Columbia University Medical Center and author of Blind Rath: The Unholy Alliance of Religion and Medicine. "Religion and science address different concerns."

That's undeniably true—up to a point. But it's also true that our brains and bodies contain an awful lot of spiritual wiring. Even if there's a scientific explanation for every strand of it, that doesn't mean we can't put it to powerful use. And if one of those uses can make us well, shouldn't we take advantage of it? "A large body of science shows a positive impact of religion on health," says Dr. Andrew Newberg, a professor of radiology, psychology and religious studies at the University of Pennsylvania and co-founder of Penn's Center for Spirituality and the Mind. "The way the brain works is so compatible with religion and spirituality that we're going to be enmeshed in both for a long time."

It's All in Your Head

"ENMESHED IN THE BRAIN" IS AS GOOD A way as any to describe Newberg's work of the past 15 years. The author of four books, including the soon to-be released How God Changes Your Brain, he has looked more closely than most at how our spiritual data-processing center works, conducting various types of brain scans on more than roo people, all of them in different kinds of worshipful or contemplative states. Over time, Newberg and his team have come to recognize just which parts of the brain light up during just which experiences.

When people engage in prayer, it's the frontal lobes that take the lead, since they govern focus and concentration. During urvy deep prayer, the parietal lobe powers down, which is what allows us to experience that sense of having loosed our earthly moorings. The frontal lobes go quieter when worshippers are involved in the singular activity of speaking in tongues—which jibes nicely with the speakers' subjective experience that they are not in control of what they're saving.

Pray and meditate enough and some changes in the brain become permanent. Long-term meditators—those with 15 years of practice or more—appear to have thicker frontal lobes than nonmeditators. People who describe themselves as highly spiritual tend to exhibit an asymmetry in the thalamus—a feature that other people can develop after just eight weeks of training in meditation skills. "It may be that some people have fundamental asymmetry [in the thalamus] to begin with," Newberg says, "and that leads them down this path, which changes the brain further."

No matter what explains the shape of the brain, it can pay dividends. Betterfunctioning frontal lobes help boost memory. In one study, Newberg scanned the brains of people who complained of poor recall before they underwent meditation training, then scanned them again after. As the lobes bulked up, memory improved.

Faith and health overlap in other ways too. Take fasting. One of the staples of both traditional wellness protocols and traditional religious rituals is the cleansing fast, which is said to purge toxins in the first case and purge sins or serve other pious ends in the second. There are secular water fasts, tea fasts and grapefruit fasts, to say nothing of the lemon, maple-syrup and cavenne-pepper fast. Jews fast on Yom Kippur; Muslims observe Ramadan; Catholics have Lent; Hindus give up food on 18 major holidays. Done right, these fasts may lead to a state of clarity and even euphoria. This, in turn, can give practitioners the blissful sense that whether the goal of the food restriction is health or spiritual insight, it's being achieved. Maybe it is, but there's also chemical legerdemain at work.

The brain is a very energy-intensive organ, one that requires a lot of calories to keep running. When food intake is cut, the liver steps into the breach, producing glucose and sending it throughout the body-always making sure the brain gets a particularly generous helping. The liver's reserve lasts only about 24 hours. after which, cells begin breaking down the body's fats and proteins-essentially living off the land. As this happens, the composition of the blood-including hormones, neurotransmitters and metabolic by-products-changes. Throw this much loopy chemistry at a sensitive machine like the brain and it's likely to go on the blink. "There are very real changes that occur in the body very rapidly that might explain the clarity during fasting," says Dr. Catherine Gordon, an endocrinologist at Children's Hospital in Boston. "The brain is in a different state even during a short-term fast." Biologically, that's not

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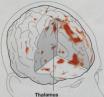
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THE PLACEBO EFFECT

Belleving in a cure leads to real bodily changes. The brain opens oplate receptors in response to faux pain pills, boosts dopamine in response to sham Parkinson's surgery and even prods tumors to shrink if a patient has faith in an ineffective drug



Dain rodus

Pain-reducing chemicals released after placebo is given

good, but the light-headed sense of peace, albeit brief, that comes with it reinforces the fast and rewards you for engaging in it all the same.

How Powerful Is Prayer?

FOR MOST BELIEVERS, THE ELEMENT OF REligious life that intersects most naturally with health is prayer. Very serious theologians believe in the power of so-called intercessory prayer to heal the sick, and some very serious scientists have looked at it too, with more than 6,000 published studies on the topic just since 2000. Some of them have been funded by groups like the John Templeton Foundation—part of whose mission is to search for overlaps of religion and science—but others have come from more dispassionate investigators.

As long ago as 1872, Francis Galton, the man behind eugenics and fingerprinting, reckoned that monarchs should live longer than the rest of us, since millions of people pray for the health of their King or Queen every day. His research showed just the opposite-no surprise, perhaps, given the rich diet and extensive leisure that royal families enjoy. An oft discussed 1988 study by cardiologist Randolph Byrd of San Francisco General Hospital found that heart patients who were prayed for fared better than those who were not. But a larger study in 2005 by cardiologist Herbert Benson at Harvard University challenged that finding, reporting that complications occurred in 52% of heart-bypass patients who received intercessory prayer and 51% of those who didn't. Sloan says even attempting to find a scientific basis for a link between prayer and healing is a "fool's errand"-and for the most basic methodological reason. "It's impossible to know how much prayer is received," he says, "and since you don't know that, you can't determine dose."

Súch exactitude does not dissuade believers—not surprising, given the centrality of prayer to faith. But there is one thing on which both camps agree: when you're setting up your study, it matters a great deal whether subjects know they're being prayed for. Give them even a hint as to whether they're in the prayer group or a control group and the famed placebo effect can blow your data to bits.

First described in the medical literature in the 1780s, the placebo effect can work all manner of curative magic against all manner of ills. Give a patient a sugar pill but call it an analgesic, and pain may actually go away. Parkinson's disease patients who underwent a sham surgery that they were told would boost the low dopamine levels responsible for their symptoms actually experienced a dopamine bump. Newberg describes a cancer patient whose tumors shrank when he was given an experimental drug, grew back when he learned that the drug was ineffective in other patients and shrank again when his doctor administered sterile water but said it was a more powerful version of the medication. The Food and Drug Administration ultimately declared the drug ineffective, and the patient died. All that may be necessary for the placebo effect to kick in is for one part of the brain to take in data from the world and hand that information off to another part that controls a particular bodily function. "The brain appears to be able to target the placebo effect in a variety of ways," says Newberg. There's no science proving that the intercessions of others will make you well. But it surely does no harm-and probably helps-to know that people are praying for you.

Faith and Longevity

IF BELIEF IN A PILL CAN BE SO POWERful, belief in God and the teachings of religion-which touch devout people at a far more profound level than mere pharmacology-ought to be even more so. One way to test this is simply to study the health of regular churchgoers. Social demographer Robert Hummer of the University of Texas has been following a population of subjects since 1992, and his results are hard to argue with. Those who never attend religious services have twice the risk of dving over the next eight years as people who attend once a week. People who fall somewhere between no churchgoing and weekly churchgoing also fall somewhere between in terms of mortality.

A similar analysis by Daniel Hall, an Episcopal priest and a surgeon at the University of Pittsburgh Medical Center, found that church attendance accounts for two to three additional years of life. To be sure, he also found that exercise accounts for three to five extra years and stain therapy for 2.5 to 3.5, Still, Joining a flock and living longer do appear to be linked.

Investigators haven't teased out all the variables at work in this phenomenon, but Hummer, for one, says some of the factors are no surprise: "People embedded in reli-

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sleep medicines it has some risk of dependency. Don't take it with alcohol.

AMBIEN is indicated for short-term treatment to help

IMPORTANT SAFETY INFORMATION

When you first start sking AMEEN, use caution in the morning when enginging in activities requiring complete alerthese until you know how you will react the morning when expended in the start of the s

have an allergic reaction while using AMBEN, contact your doctor immediately. Prescription sleep aids are often taken for 7 to 10 days — or longer as advised by your provider. Like most sleep medicines, it has some risk of dependency. There is a low occurrence of side effects associated with the short-term use of AMBEN. The most commonly observed side effects in controlled clinical trials were drowsiness (2%).

You are encouraged to report negative side effects of prescription drugs to the FDA.

Visit www.fda.gov/medwatch or 1-800-FDA-1088.



MEDICATION GUIDE AMBIEN CR® (ām'bē-ən see ahr) C-IV

(zolpidem tartrate extended-release tablets)

Read the Medication Guide that comes with AMBIEN CR before you start taking it and each time you get a refill. There may be new information. This Medication Guide does not take the place of talking to your doctor about your medical condition or treatment.

What is the most important information I should know about AMBIEN CR?

After taking AMBIEN CR, you may get up out of bed while not being fully awake and do an activity that you do not know you are doing. The next morning, you may not remember that you did anything during the night. You have a higher chance for doing these activities if you drink alcohol or take other medicines that make you sleepy with AMBIEN CR. Reported activities include:

- · driving a car ("sleep-driving")
- · making and eating food
- · talking on the phone having sex
- · sleep-walking

Call your doctor right away if you find out that you have done any of the above activities after taking AMBIEN CR.

Important:

- 1. Take AMBIEN CR exactly as prescribed . Do not take more AMBIEN CR than prescribed
- Take AMBIEN CR right before you get in bed, not sooner.
- 2. Do not take AMBIEN CR if you:
- · drink alcohol
- take other medicines that can make you sleepy. Talk to your doctor about all of your medicines. Your doctor will tell you if you can take
- · cannot get a full night's sleep

What is AMBIEN CR?

AMBIEN CR is a sedative-hypnotic (sleep) medicine. AMBIEN CR is used in adults for the treatment of a sleep problem called insomnia. Symptoms

- of insomnia include
- · trouble falling asleep

· waking up often during the night AMBIEN CR is not for children.

AMBIEN CR is a federally controlled substance (C-IV) because it can be abused or lead to dependence. Keep AMBIEN CR in a safe place to prevent misuse and abuse. Selling or giving away AMBIEN CR may harm others, and is against the law. Tell your doctor if you have ever abused or

have been dependent on alcohol, prescription medicines or street drugs. Who should not take AMBIEN CR?

Do not take AMBIEN CR if you are allergic to anything in it. See the end of this Medication Guide for a complete list of ingredients in AMBIEN CR. AMBIEN CR may not be right for you. Before starting AMBIEN CR, tell

your doctor about all of your health conditions, including if you:

have a history of depression, mental illness, or suicidal thoughts

- have a history of drug or alcohol abuse or addiction
- have kidney or liver disease
- · have a lung disease or breathing problems
- · are pregnant, planning to become pregnant, or breastfeeding Tell your doctor about all of the medicines you take including prescrip-

tion and nonprescription medicines, vitamins and herbal supplements. Medicines can interact with each other, sometimes causing serious side effects. Do not take AMBIEN CR with other medicines that can make

Know the medicines you take. Keep a list of your medicines with you to show your doctor and pharmacist each time you get a new medicine.

- How should I take AMBIEN CR? · Take AMBIEN CR exactly as prescribed. Do not take more AMBIEN CR
- than prescribed for you. · Take AMBIEN CR right before you get into bed.
- Do not take AMBIEN CR unless you are able to stay in bed a full Tell your doctor if you cannot swallow tablets whole.
- night (7-8 hours) before you must be active again. Swallow AMBIEN CR Tablets whole. Do not chew or break the tablets.

- For faster sleep onset, AMBIEN CR should NOT be taken with or immediately after a meal. Call your doctor if your insomnia worsens or is not better within 7 to
- 10 days. This may mean that there is another condition causing your sleep problems. · If you take too much AMBIEN CR or overdose, call your doctor or
- poison control center right away, or get emergency treatment. What are the possible side effects of AMBIEN CR?

Serious side effects of AMBIEN CR include:

- · getting out of bed while not being fully awake and do an activity that you do not know you are doing. (See "What is the
- most important information I should know about AMBIEN CR? · abnormal thoughts and behavior. Symptoms include more outgoing or aggressive behavior than normal, confusion, agitation, hallucinations, worsening of depression, and suicidal thoughts or actions.
- memory loss
 - anxiety
 - severe allergic reactions. Symptoms include swelling of the tongue or throat, trouble breathing, and nausea and vomiting. Get emergency medical help if you get these symptoms after taking AMBIEN CR

Call your doctor right away if you have any of the above side effects or any other side effects that worry you while using AMBIEN CR. The most common side effects of AMBIEN CR are:

- · headache
- · sleepiness dizziness
- · You may still feel drowsy the next day after taking AMBIEN CR. Do not
- drive or do other dangerous activities after taking AMBIEN CR until you feel fully awake. After you stop taking a sleep medicine, you may have symptoms for

1 to 2 days such as: trouble sleeping, nausea, flushing, lightheadedness, uncontrolled crying, vomiting, stomach cramps, panic attack, nervousness, and stomach area pain.

These are not all the side effects of AMBIEN CR. Ask your doctor or pharmacist for more information.

Call your doctor for medical advice about side effects. You may report side effects to EDA at 1-800-EDA-1088

How should I store AMBIEN CR?

- Store AMBIEN CR at room temperature, 59° to 77°F (15° to 25° C). · Keep AMBIEN CR and all medicines out of reach of children. General Information about AMBIEN CR
- · Medicines are sometimes prescribed for purposes other than those
- listed in a Medication Guide. Do not use AMBIEN CR for a condition for which it was not prescribed.
- . Do not share AMBIEN CR with other people, even if you think they have the same symptoms that you have. It may harm them and it is against the law. This Medication Guide summarizes the most important information

about AMBIEN CR. If you would like more information, talk with your doctor. You can ask your doctor or pharmacist for information about AMBIEN CR that is written for healthcare professionals. For more information about AMBIEN CR, call 1-800-633-1610 or visit www.ambiencr.com.

What are the ingredients in AMBIEN CR?

Active Ingredient: Zolpidem tartrate

Inactive Ingredients: The 6.25 mg tablets contain; colloidal silicon dioxide, hypromellose, lactose monohydrate, magnesium stearate, microcrystalline cellulose, polyethylene glycol, potassium bitartrate, red ferric oxide, sodium starch glycolate, and titanium dioxide. The 12.5 mg tablets contain: colloidal silicon dioxide, FD&C Blue #2, hypromellose, lactose monohydrate, magnesium stearate, microcrystalline cellulose, polyethylene glycol, potassium bitartrate, sodium starch glycolate, titanium dioxide, and yellow ferric oxide.

Rx Only

This Medication Guide has been approved by the U.S. Food and Drug Administration sanofi-aventis U.S. LLC

Bridgewater, NJ 08807

AMBCR-IAN08a-M-A January 2008a

MEDICATION GUIDE

AMBIEN® (ām'bē-ən) Tablets C-IV
(zolpidem tartrate)

Read the Medication Guide that comes with AMBIEN before you start taking it and each time you get a refill. There may be new information. This Medication Guide does not take the place of talking to your doctor about your medical condition or treatment.

What is the most important information I should know about AMRIEN?

After taking AMBIEN, you may get up out of bed while not being ituly awake and do an activity that you do not know you are deing. The next morning, you may not remember that you did anything during the night. You have a higher chance for doing these activities if you drink alkohol or take other medicines that make you sleepy with AMBIEN. Renorde activities include:

- · driving a car ("sleep-driving")
- making and eating food
- talking on the phone
- having sex
- · sleep-walking

Call your doctor right away if you find out that you have done any of the above activities after taking AMBIEN.

Important:

- 1. Take AMBIEN exactly as prescribed
- Do not take more AMBIEN than prescribed.
 Take AMBIEN right before you get in bed, not sooner.
- 2. Do not take AMBIEN if you:

2. Do not take AMBIEN II you:

- drink alcohol
- take other medicines that can make you sleepy. Talk to your doctor about all of your medicines. Your doctor will tell you if you can take AMBIEN with your other medicines.
 cannot get a full night's sleep

What is AMBIEN?

AMBIEN is a sedative-hypnotic (sleep) medicine. AMBIEN is used in adults for the short-term treatment of a sleep problem called insomnia. Symptoms of insomnia include:

· trouble falling asleep

AMBIEN is not for children.

AMBIEN is a federally controlled substance (C-IV) because it can be abused or lead to dependence. Keep AMBIEN in a safe place to prevent misuse and abuse. Selling or giving away AMBIEN may harm others, and is against the law. Tell your doctor if you have ever abused or have been dependent on alcohol, prescription medicines or street drugs.

Who should not take AMBIEN?

Do not take AMBIEN if you are allergic to anything in it.

See the end of this Medication Guide for a complete list of ingredients in AMBIEN.

AMBIEN may not be right for you. Before starting AMBIEN, tell your doctor about all of your health conditions, including if you:

- have a history of depression, mental illness, or suicidal thoughts
- have a history of drug or alcohol abuse or addiction
- have kidney or liver disease
- have a lung disease or breathing problems
- are pregnant, planning to become pregnant, or breastfeeding
 Tell your doctor about all of the medicines you take including prescrip-

tion and nonprescription medicines, vitamins and herbal supplements. Medicines can interact with each other, sometimes causing serious side effects. Do not take AMBIEN with other medicines that can make you sleepy.

Know the medicines you take. Keep a list of your medicines with you to show your doctor and pharmacist each time you get a new medicine.

How should I take AMBIEN?

- Take AMBIEN exactly as prescribed. Do not take more AMBIEN than prescribed for you.
- Take AMBIEN right before you get into bed.

- Do not take AMBIEN unless you are able to stay in bed a full night (7-8 hours) before you must be active again.
- For faster sleep onset, AMBIEN should NOT be taken with or immediately after a meal.
- Call your doctor if your insomnia worsens or is not better within 7 to 10 days. This may mean that there is another condition causing your sleep problem.
- If you take too much AMBIEN or overdose, call your doctor or poison control center right away, or get emergency treatment.

What are the possible side effects of AMBIEN? Serious side effects of AMBIEN include:

- getting out of bed while not being fully awake and do an activity that you do not know you are doing. (See "What is the most important information I should know about AMBIEN?)
 abnormal thoughts and behavior. Symptoms include more outgoing
 - or aggressive behavior than normal, confusion, agitation, hallucinations, worsening of depression, and suicidal thoughts or actions.
- memory loss
- anxiety
 severe allergic reactions. Symptoms include swelling of the tongue

or throat, trouble breathing, and nausea and vomiting. Get emergency medical help if you get these symptoms after taking AMBIEN.

Call your doctor right away if you have any of the above side effects or any other side effects that worry you while using AMBIEN.

The most common side effects of AMBIEN are:

drowsiness

- dizziness
- · diarrhea
- · "drugged feelings"
- You may still feel drowsy the next day after taking AMBIEN. Do not drive or do other dangerous activities after taking AMBIEN until

you feel fully awake.

After you stop taking a sleep medicine, you may have symptoms for 1 to 2 days such as: trouble sleeping, nausea, flushing, lightheadedness,

uncontrolled crying, vomiting, stomach cramps, panic attack, nervousness, and stomach area pain.

These are not all the side effects of AMBIEN. Ask your doctor or

pharmacist for more information.
Call your doctor for medical advice about side effects. You may report side effects to FDA at 1–800–FDA–1088.

How should I store AMBIEN?

- Store AMBIEN at room temperature, 68° to 77°F (20° to 25°C).
- · Keep AMBIEN and all medicines out of reach of children.

General Information about AMBIEN

- Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide.
- Do not use AMBIEN for a condition for which it was not prescribed.
 Do not share AMBIEN with other people, even if you think they have
- the same symptoms that you have. It may harm them and it is against the law.

This Medication Guide summarizes the most important information about AMBIEN. If you would like more information, talk with your doctor. You can ask your doctor or pharmacist for information about AMBIEN that is written for healthcare professionals. For more information about AMBIEN, call 1-800-633-1610.

What are the ingredients in AMBIEN?

Active Ingredient: Zolpidem tartrate Inactive Ingredients: hydroxypropyl methylcellulose, lactose, magnesium stearate, micro-crystalline cellulose, polyethylene glycol, sodium starch glycolate, and titanium dioxide. In addition, the 5 mg table contains FD&C Red No. 40, iron oxide colorant, and polysorbate 80.

KX Uniy

This Medication Guide has been approved by the U.S. Food and Drug Administration.

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June 2008



HOW RELIGIONS VIEW THE BEYOND

Medicine and religion share at least one trait—both can be seen as responses to the prospect of death. But while science is quiet on a possible afterlife, religious practices are shaped by their conception of that undiscovered country:

JUDAISM Jewish texts have little to say about a possible afterlife, placing more focus on the proper actions in this life, not the one to come

CHRISTIANITY The vast majority of Christians believe in heaven and hell and that your destination depends on your deeds and faith during life

ISLAM Similar to Christians, Muslims believe in a day of judgment in the afterlife, when the dead will be divided between paradise and damnation

BUDDHISM Though specific beliefs vary by sect, Buddhists hold fast to the doctrine of reincarnation, ending only in the final liberation known as Nirvana

HINDUISM Like Buddhists, Hindus believe in reincarnation and karma, with the status of your next life depending on your actions in this one

TAOISM Life and death are flip sides of the Tao, and death is a transformation from being to nonbeing, with no heaven or hell gious communities are more likely to rely on one another for friendship, support, rides to doctor's appointments."

But even hard scientists concede that those things aren't the whole story and that there's a constellation of other variables that are far harder to measure. "Religious belief is not just a mind question but involves the commitment of one's body as well," says Ted Kaptchuk, a professor of medicine at Harvard Medical School. "The sensory organs, tastes, smells, sounds, music, the architecture of religious buildings [are involved]." Just as the very act of coming into a hospital exposes a patient to sights and smells that are thought to prime the brain and body for healing, so may the act of walking into a house of worship.

Neal Krause, a sociologist and publichealth expert at the University of Michigan, has tried to quantify some of those more amorphous variables in a longitudinal study of 1,500 people that he has been conducting since 1997. He has focused particularly on how regular churchgoers weather economic downturns as well as the stresses and health woes that go along with them. Not surprisingly, he has found that parishioners benefit when they receive social support from their church. But he has also found that those people who give help fare even better than those who receive it-a pillar of religious belief if ever there was one. He has also found that people who maintain a sense of gratitude for what's going right in their lives have a reduced incidence of depression, which is itself a predictor of health. And in another study he conducted that was just accepted for publication, he found that people who believe their lives have meaning live longer than people who don't. "That's one of the purported reasons for religion," Krause says. "The sign on the door says, 'Come in here and you'll find meaning."

African-American churches have been especially good at maximizing the connection between faith and health. Earlier in American history, churches were the only institutions American blacks had the freedom to establish and run themselves, and they thus became deeply embedded in the culture. "The black church is a different institution than the synagogue or mosque or even the white church," says Ken Resnicow, a professor of health and behavior education at the University of Michigan

School of Public Health. "It is the center of spiritual, community and political life."

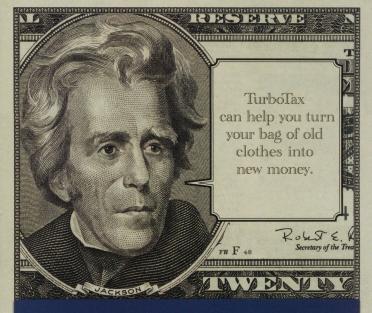
Given the generally higher incidence of obesity, hypertension and other lifestyle ills among African Americans, the church is in a powerful position to do a lot of good. In the 1990s, Marci Campbell, a professor of nutrition at the University of North Carolina, helped launch a four-year trial called North Carolina Black Churches United for Better Health. The project signed up 50 churches with a goal of helping the 2,500 parishioners eat better, exercise more and generally improve their fitness. The measures taken included having pastors preach health in their sermons and getting churches to serve healthier foods at community events.

The program was so successful that it has been renamed the Body and Soul project and rolled out nationally-complete with literature. DVDs and cookbooks-in collaboration with the National Cancer Institute and the American Cancer Society. To skeptics who conclude that the churches have played a secondary role in the success of the programs-as a mere venue for secular health counseling-Campbell points out that in her studies, the most effective pitches came not from the nutritionists but from the pulpit. "The body is a temple, and the connection was made between the physical body and religious and spiritual well-being," she says.

Joining Hands

MANY SCIENTIFIS AND THEOLOGIANS WHO study these matters advocate a system in which both pastoral and medical care are offered as parts of a whole. If a woman given a diagnosis of breast cancer is already offered the services of an oncologist, a psychologist and a reconstructive surgeon, why shouldn't her doctor discuss her religious needs with her and include a pastor in the mix if that would help:

While churches are growing increasingly willing to accept the assistance of
health-care experts, doctors and hospitals
have been slower to seek out the help of
spiritual connselors. The fear has long
been that patients aren't interested in asking such spiritually intimate questions
of their doctors, and the doctors, for their
part, would be uncomfortable answering
them. But this turns out not to be true.
When psychologist Jean Kristeller of Indiana State University conducted a survey





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BLOOD SENTINELS

HIV patients who say they're spiritual have higher levels of CD4 immunity cells

ONE SCAN, TWO VIEWS

Nuns who saw a brain image of a person in prayer said it proves the power of God; atheists said it proves that religion is just biology



FASTING When the body is deprived of callories (1), first the liver (2) and then fat and protein deposits (3) compensate for the deficit, providing energy for needy cells. This altered body chemistry can affect the brain (4), leading some to feel an otherworldy connection



of oncologists, she found that a large proportion of them did feel it was appropriate to talk about spiritual issues with patients and to offer a referral if they weren't equipped to address the questions themselves. They didn't do so simply because they didn't know how to raise the topic and feared that their patients would take offense, in any event. When patients were asked, they insisted that they'd welcome such a conversation but that their doctors had never initiated one. What both groups needed was someone to break the ice.

Kristeller, who had participated in earlier work exploring how physicians could help their patients quit smoking, recalled a short-five- to seven-minuteconversation that the leader of a study had devised to help doctors address the problem. The recommended dialogue conformed to what's known as patient-centered care-a clinical way of saying doctors should ask questions then clam up and listen to the answers. In the case of smoking, they were advised merely to make their concern known to patients, then ask them if they'd ever tried to quit before. Depending on how that first question was received, they could ask when those earlier attempts had been made, whether the patients would be interested in trying again and, most important, if it was all right to follow up on the conversation in the future. "The more patientcentered the conversations were, the more impact they had," Kristeller says.

The success of that approach led her to develop a similar guide for doctors who want to discuss religious questions with cancer patients. The approach has not yet been tested in any large-scale studies, but in the smaller surveys Kristeller has conducted, it has been a roaring success: up to 90% of the patients whose doctors approached them in this way were not offended by the overture, and 75% said it was very helpful. Within as little as three weeks, the people in that group reported reduced feelings of depression, an improved quality of life and a greater sense that their doctors cared about them.

Even doctors who aren't familiar with Kristeller's script are finding it easier to combine spiritual care and medical care. HealthCare Chaplaincy is an organization of Christian, Jewish, Muslim and Zen Buddhist board-certified chaplains affiliated with more than a dozen hospitals and clinics in the New York City area. The group routinely provides pastoral care to patients as part of the total package of treatment. The chaplains, like doctors, have a caseload of patients they visit on their rounds, taking what amounts to aspiritual history and either offering counseling on their own or referring patients to others. The New Walter Smith, president and CEO of the chaplaincy and an end of life specialist, sees what his group offers as a health-care product—one that is not limited to believers.

What patients need, he says, is a "person who can make a competent assessment and engage a patient's spiritual person in the service of health. When people say, "I'm not sure you can help because I'm not very religious,' the chaplains say, 'That's not a problem. Can I sit down and engage you in conversation?"

Patients who say ves often find themselves exploring what they consider secular questions that touch on such primal matters of life and death, they might as well be spiritual ones. The chaplains can also refer patients to other care providers, such as social workers, psychologists and guided-imagery specialists. The point of all this isn't so much what the modality is; it's that the patient has a chance to find one that works. "People say you tell the truth to your doctor, your priest and your funeral director," says Smith, "because these people matter at the end." It's that truth-or at least a path to it-that chaplains seek to provide.

Smith's group is slowly going national, and even the most literal-minded scientists welcome the development. Says Sloan, the author of Blind Faith: "I think that a chaplain's job is to explore the patient's values and help the patient come to some decision. I think that's absolutely right."

Sloans view is catching on Few people think of religion as an alternative to medicine. The frontline tools of an emergency room will always be splints and sutures, not prayers—and well-applied medicine along with smart prevention will always be the best ways to stay well. Still, if the U.S.'s expanding health-care emergency has taught us anything, it's that we can't afford to be choosy about where we look for answers. Doctors, patients and pastors battling disease already know that help comes in a whole lot of forms. It's the result, not the source, that counts the most.

BRYAN WALSH/NEW YORK



Faith and **Healing:** A Forum

Three experts—the Rev. George Handzo, a chaplain with the HealthCare Chaplaincy of New York City; Dr. Andrew Newberg, a radiologist and psychiatrist at the University of Pennsylvania; and Dr. Richard Sloan, a psychiatrist at Columbia University—discuss the role that belief should play in science

BY ALICE PARK

What role does religion play in health, and health in religion?

Dr. Richard Sloan: Spirituality and religion play a substantial role in helping patients overcome discomfort. But I don't think that it's any business of medicine, and I think it's extremely difficult for science to study. I am greatly supportive of the role of health-care chaplains for patients who have spiritual or religious concerns. But I don't think it's the doctor's job to be involved in that, other than to refer to a professional.

So doctors should not be taking spiritual histories?

Sloan: I don't think they should be taking spiritual histories.

The Rev. George Handzo: Dr. Sloan and I are pretty much in agreement, but it's important how one defines spiritual history and what actually goes into that. There's been a

lot of fuzzy talk about what's screening, what's history, what's assessment. I would like to differentiate a history, and call that screening, and say that's the doctor's job. The physician's job, as Dr. Sloan pointed out correctly, is to discover where the problem is and get it pointed in the right direction. An assessment, a full (spiritual) assessment. would be the chaplain's job.

Dr. Andrew Newberg: My primary area of research has been looking at the neurobiology of different religious and spiritual practices, and one of the things I try to advocate is that we need to learn more about the best ways of enabling doctors to find out the questions that they need to ask. We need to learn how best to ask those questions, when to ask those questions and how often to ask those questions.

A lot of people have concerns about physicians playing too much of a role in 'I think society has made a iudgment that science trumps religion.'



'We can bring science and religion together in a dialogue that may ultimately benefit them both.'

DR. ANDREW NEWBERG



the religious and spiritual beliefs of patients, so we need to understand what both the doctor's and the patient's motivations are and try to understand when it shouldn't be done and why it shouldn't be done.

I felt woefully unprepared to deal with those kinds of issues when I found myself having to tell a patient that they now had cancer or that they were going to die soon, or talking about a family member who's going to die soon when the family brought up religious and spiritual issues. I didn't even know who to refer to. And I think there's been some movement to at least help with that education, but I think we need to learn more about it.

Dr. Newberg, you are careful not to talk about humans as being hardwired for religion, because hardwiring implies a hardwirer, and science hasn't vet established that.

Newberg: The real issue for us is to try to look at data and to interpret it carefully. If you're doing a brain scan of somebody who experiences being in God's presence, we have to know what that means. Basically, the scan is showing you what is happening in the brain when they have the experience. It doesn't necessarily reduce it to just what is going on in the brain, and it also doesn't necessarily prove that the person was actually in God's presence.

So I think we have to be cautious about what we do with the information that we have right now. I think we have a long way to go in terms of really learning what the nature of those kinds of experiences actually is. That's why even though I think the research shows that there are a lot of different changes that go on in the brain when people engage in religious and spiritual practices, that doesn't mean that there was somebody who came in and did the hardwiring.

'It's a fatal flaw to think that you can use the methods of science to learn something meaningful about religion.'



Dr. Sloan, how do you react to the idea of a divine interventionist?

Sloan: Well, that conception is antithetical to science. Science doesn't deal in supernatural explanations, and that's a supernatural explanation. Religion and science address different concerns, and it's perfectly plausible, I think, as Dr. Newberg has suggested, to be a scientist and still believe in divine presence. But that doesn't mean that your belief in the divine presence finds its way into your science. Those are different things. Religion deals with a different domain.

Handzo: Yes, I would say that's right. I think part of the reason this whole debate has raised some backles in the religious community is the perception that we're trying to prove the existence of God. And, of course, religious people, and I think rightfully so. say, No. no. no, that's a matter of faith. You are now crossed over, and you are trying to take science into the realm of religion and use scientific method and methodology to say that my faith is right or wrong. That's just not going to work, and I'm going to push back on that as a religious person.

I started out as an undergraduate as a scientist and only went to religion later, and there are those people who said to me that I couldn't DR. RICHARD SLOAN:

- The doctor should find out enough to know how to refer a patient for spiritual guidance.
- ✓ Doctors should not be "taking spiritual histories."
- √ "Science doesn't
 deal in supernatural
 explanations."



be ordained because I had been a scientist, and that polluted my thinking.

Science and religion have different ways of thinking about reality that are both helpful, and both need to be accounted for. And I think in terms of health, the issue is how do we account for—in the health-care system and in the practice of health—the process of faith? And how does that integrate into how medicine gets practiced or how chaplaincy gets practiced or psychology gets practiced?

Sloan: I frankly think there is nothing that science can do that can contribute to religion, and I think it's a fatal flaw to think that you can use the methods of science to learn something meaningful about religion.

But can't the tools of science be used to teach us about the subjective experience of religion—as Dr. Newberg is describing, with brain scans and the like—and teach us something about how we process it?

Stoan: Let me ask you a different question. Would it be meaningful if we did a brain scan of someone before and after eating cheese? I don't understand the value of developing beautiful images, very appealing, aesthetic images of brain scans and people engaged in various religious experiences. I don't see the value any more than imaging people while eating cheese.

We explore what the brain looks like in depressed people, in people struggling with memory issues ...

Sloan: But why? To understand how the brain works so we can develop interventions to treat depression and to treat memory loss. And that's absolutely appropriate. Are there interventions that will come from [imaging religious experiences]? Handzo: Well, certainly some work is pure research in order to fathom things better. There are no particular interventions that come from picking up rocks on the moon, but we do it because it teaches us more about the world around us.

Sloan: Fair enough, but there's a seductive appeal about neuroscience explanations, that there must be something significant here because you can see it in the brain scan. We're infatuated with neuro-science because of the very beautiful images that we can see, but the real question is, What do those images tell us that's of any value, whether it's basic sejence or amplied?

Handzo: Neuroscience may be a smaller case of a larger reality. We live in a culture where I think science, the evidence of science, trumps the evidence of faith. If you give a drug that's supposed to work in six months, and three years later you get a remission, that's called delayed effect. And I've said to my oncologist colleagues, Why is that not a miracle? What evidence do vou have, because vou have no evidence that this is delayed effect-it's just what you're calling it. Tell me that that's not a miracle?

And the same thing in psychiatry. To be ordained in most religions, at least in Christian religions, you have to prove to a group of other people that God has spoken to you. This in psychiatry is called thought insertion. It's a diagnosis. So if I believe God has spoken to me, in the religious world I get to stand for ordination; in the scientific world, I could be diagnosed. Maybe both are right.

If you walk into my hospital room, and I say I don't believe in God, and you still provide a service, is this really spiritual at all? Could the care be the equivalent of such secular practices as meditation or yoga, and how would you distinguish that?



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- · Kidney or liver problems
- · Blood problems, such as sickle cell anemia or leukemia
- · A deformed penis. Peyronie's disease, or an erection that lasted more than 4 hours
- · Stomach ulcers or any kind of bleeding problems

Tell your doctor about all your medicines. Include over-the-counter medicines, vitamins, and herbal products. Tell your doctor if you take or use:

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- know if these events are caused by VIAGRA and medicines like it or caused by other factors. They may be caused by conditions like high blood pressure or diabetes. If you have sudden vision changes, stop using VIAGRA and all medicines like it. Call your doctor right away.
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your doctor.

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MIND & BODY | ROUNDTABLE

Handzo: Well, I think it's important to differentiate and to define spirituality and religion. Religion has to do with an organized set of beliefs. So I'm a Lutheran; I adhere to a set of beliefs that has been defined as Lutheran, and I identify with a community that's Lutheran.

Spirituality, I think, is a much so do with proably a personal quest. Lutheran is what some other people have said Lutheran is. Your spirituality is what you say it is, and so my job as a chaplain is to discover what you say it is and to help that spirituality be helpful to you in coping with the illness or what ever sig going on in your life.

Newberg: I think trying to define it is absolutely one of the areas that we really need to get a handle on, because one of the mistakes that is often made in the medical context can be that, oh, somebody is this particular religion, so they believe in these things. We have to be careful about how we define and slot everybody into these different categories. Atheists as well.

Getting back to brain structure—Dr. Sloan, would you see the varying degrees of spirituality in people as being rooted in something as simple as brain architecture?

Sloan: Well, all our experience in some way derives from the brain-everything we experience, from meditation to eating cheese. So in some way, it's rooted in the brain. The concern I have is that science operates in a reductionist way, and if you try to understand a spiritual experience or a religious experience from the science perspective, ultimately you are going to reduce it to the coursing of neurochemicals in the brain. And while that may be satisfying to a scientist, it's anathema to a theologian. which illustrates the limits of

science. There are some questions for which science can't provide an adequate answer.

So, Rev. Handzo, how do you give that coursing of neurochemicals meaning? If you are counseling a patient, someone who has received a diagnosis of terminal cancer, what do you say?

Handzo: The secret is, we say as little as possible. There's nothing you can say. I mean, that alludes to this whole theological question of why does this happen—and we simply do not know. I agree with Dr. Sloan: I don't think that I want to know why God does it that way. Maybe God has nothing to do with it. I'm not sure any of those things are things I want to know, being a person of faith.

My job is to help them discover the meaning for themselves. What is the meaning for you? An example of that: I remember a mother of a child with cancer who said, "God is going to heal my son," Well, the doctors knew that God wasn't going to heal her son-I still held out-but eventually she came to the understanding that God was not going to heal her son. She said, "Well, you know, I didn't listen to God well. God has another plan for my son, a greater plan." For her, the fact that she could feel that God was still in control

and understand that what God does is good—that was enough.

Sloan: So this is an issue that is periodically in the news. What do physicians—what does the health-care system—do for the patient if the mother assumes a religious stance that interferes with treatment?

Handzo: I think ethically we as a society have some duties to people who are unable to make judgments for themselves, and we have to make some judgments, right or wrong, And so I think we've done the right thing in saying sometimes, for whatever reason it is, whether it's faith or psychopathology or whatever, people who have responsibility for minor children don't make right decisions, are not fit to make right decisions -I don't care why-and the state has an interest in preserv-

ing that life.

Just as free speech has a limit, freedom of religion has a limit. There are limits in our society. And that's the way we've set society up.

Newberg: I'll be idealistic for a moment. I would love to see the practice of medicine be a team event. In a hospital setting, you can have a team where you can bring in somebody from pastoral care to talk to them about that, you can bring in a social worker to deal with the social issues, a therapist if need be. And then just as you hope that they as a family are going to make a decision, you as a team can make a decision, and then that way you have the best way of optimizing what I think are really the four dimensions of the personthe biological, the social, the psychological and the spiritual. I think we as a society, and the medical profession in general, need to really think through these issues, because it would be great to function as a team, to really take care of the whole person and to heal that person in whatever

way that means.

THE REV. GEORGE HANDZO;

✓ "Science and religion have different ways of thinking about reality."

✓ Chaplains help patients discover meaning "for themselves."

✓ "Freedom of religion has a limit."



TIME February 23, 2009

KASHMIR, INDIA

KORANIC HEALING

In some sects of Islam, the verses of the Koran are thought to have healing properties. In Srinagar, the capital of the Indian-controlled section of Kashmir, Peer Munshi Syed Hussain Kazmi treats a man suffering from temporary blindness with prayers and restorative Koranic





LAC. ALBANIA

SHNA NDO HOLY ROCK

Shna Ndo was a pilgrim on his way to Jerusalem who stopped in the town of Lac, Albania, and performed miracles. Today, followers believe that touching the rock, as the boy above is doing, can heal sickness



SIBERIA, RUSSIA

SHAMANIC

The shamans of Siberia believe the world is divided into a visible realm and an invisible one populated by spirits. It is the shaman's role to communicate with those spirits—and persuade them to provide a better life for humans, A shamanic healer summons the spirits using the bodhran, a kind of drum



MIND & BODY | RITUALS

How The World Heals

Across countries and faiths, the devout believe the power of the spirit can heal the ills of the flesh. Science might question the Santeria practitioners of Cuba or the shamans of Siberia, but to believers around the world, religion can offer comfort even when modern medicine falls short

BY BRYAN WALSH

SANTUARIO DE CHIMAYO, N.M.

ROOM OF

At this rural church 30 miles (48 km) north of Santa Fe, the sick come to touch the holy dirt, which is said to have healing powers. Some kneel and kiss the ground; others rub the dirt on their body or even eat some of it. Family members rub the dirt on photographs of those too ill to make the trip themselves





HAVANA

SANTERIA CEREMONY

A blend of African, Native American and Roman Catholic religious practices, Santeria involves the worship of Santos, an amalgam of African gods and Christian saints. High priest Victor Betancourt prepares a rooster for sacrifice, in a ceremony for the recovery of ailing Cuban leader Fidel Castro



BALI, INDONESIA

MELASTI

The Hindu residents of the Indonesian island of Bail are known for their elaborate spiritual practices. A man participates in Melasti, the holiest event of the Balinese cuent of the Balinese cuent of the Balinese calendar, a purifying ceremony that prepares not only the individual but the entire community for the new year.

QUIBAYO, VENEZUELA

VELACION

In the velación, or candle ceremony, the patient lies on an oracolo, a drawing of esoteric symbols made on the ground with talcum, and is surrounded by candles and fruit and showered with flower petals meant to impart energy.



SUDAN

HEALING

Sudanese refugees prepare the milhaya, a traditional healing drink. Verses from the Koran are written on a wooden plate with a special ink and pen, the plate is then washed with water, and this holy fluid is drunk by the sick





KIEV, UKRAINE

EMBASSY OF GOD

Founded 12 vears ago by the Niaerian pastor Sunday Adelaja, the Embassy of God is a charismatic Protestant sect. Followers believe certain among them are selected to receive the Holy Spirit, which allows them to speak in tongues and heal with their hands. One such woman uses the spirit to elicit a trance and cure an ill church member



LOURDES, FRANCE

HOLY

Catholics believe the Virgin Mary appeared to a peasant girl in Lourdes in 1858, and the location has become one of the world's most popular for religious pilgrimages. Water from a spring at the site of the apparition is believed to have curative properties, and sick pilgrims drink it in hopes of a healing miracle









Keeping (Or Finding) The Faith

Research Institutes. The study of religion and medicine is clearly a growth market

NOT ALL THAT LONG AGO, YOU'D HAVE had a hard time finding a research institute, an academic department or even a decent conference exploring the link between spirituality and health. And with good reason. Health is science, spirituality is something else entirely, and people who say otherwise clearly need to sit down with a medical journal or two.

But that's all changing. Everyone's got a stake in getting human health right—whether families and individuals simply trying to stay well or governments trying to build a functioning health-care system that doesn't break the bank. With so much on the line, no one can afford to take options off the table.

For that reason, investigators around the world backed by both public and private money are studying the faith factor in all manner of diseases and conditions. They have examined the spiritual-care needs of children with terminal

illnesses and looked at how religion and superstition affect schizophrenia in China and how spirituality influences the well-being of college students in Malta and nuns in India. They have probed the links between religion and psychological woes too: neuroticism in Dutch twins, obsessive-compulsive symptoms in Italians, death anxiety among Egyptian nursing students and substance abuse in adolescents in Ierusalem. They have tried to measure the benefits of Bible therapy for patients with Alzheimer's disease, as well as the impact of religious guilt and congregational criticism on doubting members of the flock. They've looked at the health effects of psychoactive sacramentals (think pevote) and the spiritual preferences of neo-pagans (think Wiccans and druids).

The fact that what began as a trickle of studies has become a torrent doesn't mean that everyone is happy, and many scientists will continue to have nothing to do with what they see as fluff. Still, the movable feast of institutes, academic treatiese, self-help books, websites, healing centers and luxury spas with a spiritual bent grows steadily larger. Here is just a sampling of what's available.

——N DAND RIEKLIE

Center for Spirituality and The Mind

University of Pennsylvania

Brain Sca

A workshop for high-tech imagery: this is your brain on prayer—or meditation or speaking in tongues. Researchers also study changes in blood pressure, hormones and immunesystem function during

spiritual practices. www.uphs.upenn.edu/ radiology/csm/index.html

Center for Spirituality & Healing

University of

Minnesota Shaman Outreach

Fifty faculty members from a dozen academic areas conduct research into alternative medicine and healing traditions, including those of shamans serving the local community of Hmong immigrants from Southeast Asia.

www.csn.umn.edu

Center for Spirituality, Theology and Health

Duke University

Community of Scholars

Academic powerhouse that promotes research to improve our understanding of "spirituality, health and human flourishing." Alms to push the interdisciplinary field into a "new era of significance, visibility and impact."

spiritualityandhealth.duke edu/index.html

National Center for Complementary And Alternative Medicine

National Institutes of Health

Federal Faith

Alternative medicine

Atternative medicine established this beachhead with the Federal Government in 1991. NCCAM funds research and serves as a clearinghouse for consumer information on acupuncture, herbs, hypnosis and more.

nccam.nih.g

Templeton Foundation

West Conshohocken,

Private Philanthropy

Family foundation established by the late philanthropist Sir John Templeton. Its mission is to address big questions and foster dialogue between science and religion through grants, prizes and book publishing.

templeton.org

ir.gov templeton.



Patient Information SINGULAIR® (SING-u-lair) Tablets, Chewable Tablets, and Oral Granules Generic name: montelukast (mon-te-LOO-kast) sodium

Read this information before you start taking SINGULAIR. Also, read the leaflet you get each time you refill SINGULAIR, since there may be new information in the leaflet since the last time you saw it. This leaflet

What is SINGULAIR*?

· SINGULAIR is a medicine called a leukotrier

substances in the dody career leukortrenes Blocking leukortrenes improves asthma and allergic rhinitis. SINGULAIR is not a steroid. Studies have shown that SINGULAIR does not affect the growth rate of children. (See the end of this leaflet for more than the standard standa information about asthma and allergic rhinitis.)

SINGULAIR is prescribed for the treatment of asthma.

1. Asthma

SINGULAIR should be used for the long-term management of asthma in adults and children ages 12 months and older.

Do not take SINGULAIR for the immediate relief

2. Prevention of exercise-induced asthma SINGULAIR is used for the prevention of exercise-induced asthma in patients 15 years of age and older.

3. Allergic Rhinitis.

NGULAIR is used to help control the symptoms treat seasonal allergic rhinitis (outdoor allergies that happen part of the year) in adults and children ages 2 years and older, and perennial allergic initis (indoor allergies that happen all year) in

adults and children ages 6 months and older Who should not take SINGULAIR?

Do not take SINGULAIR if you are allergic to SINGULAIR

The active ingredient in SINGULAIR is montelukast

See the end of this leaflet for a list of all the ingredients

What should I tell my doctor before I start taking SINGULAIR?

- Pregnancy: If you are pregnant or plan to become pregnant. SINGULAIR may not be right for you. Breast-feeding: If you are breast-feeding, SINGULAIR may be passed in your milk to your
- Medical Problems or Allergies: Talk about any
- Other Medicines: Tell your doctor about all the medicines you take, including prescriptor supplements. Some medicines may affect how SINGULAIR works, or SINGULAIR may affect ow your other medicines work

How should I take SINGULAIR?

For adults and children 12 months of age and older with asthma:

- Take SINGULAIR once a day in the evening.
 Take SINGULAIR every day for as long as your doctor prescribes it, even if you have no asthr
- You may take SINGULAIR with food or without food. If your asthma symptoms get worse, or if you need to increase the use of your inhaled rescue medicine for asthma attacks, call your doctor
- Do not take SINGULAIR for the immediate relief of an asthma attack. If you get an asthma attack,
- gave you for treating asthma attacks. Always have your inhaled rescue medicine for
- asthma attacks with you.

 Do not stop taking or lower the dose of your other

For patients 15 years of age and older for the

- Take SINGULAIR at least 2 hours before exercise.
- asthma attacks with you.
 If you are taking SINGULAIR daily for chronic
- asthma or allergic rhinitis, do not take an additional dose to prevent exercise-induced

- treatment of exercise-induced asthma.

 Do not take an additional dose of SINGULAIR
- For adults and children 2 years of age and older with seasonal allergic rhinitis, or for adults and children 6 months of age and older with perennial
- . Take SINGULAIR once a day, at about the same
- time each day.
 Take SINGULAIR every day for as long as your
- doctor prescribes it.
 You may take SINGULAIR with food or without food
- How should I give SINGULAIR oral granules to my child? Do not open the packet until ready to use

SINGULAIR 4-mg oral granules can be given:

- directly in the mouth;
 dissolved in 1 teaspoonful (5 mL) of cold or room temperature baby formula or breast milk; mixed with a spoonful of one of the following soft foods at cold or room temperature: applesauce,
- Be sure that the entire dose is mixed with the food baby formula, or breast milk and that the child is

IMPORTANT: Never store any oral granules mixed with food, baby formula, or breast milk for use at a later time. Throw away any unused portion

Do not put SINGULAIR oral granules in any liquid drink other than baby formula or breast milk. However, your child may drink liquids after swallowing the SINGULAIR oral granules. What is the dose of SINGULAIR?

For asthma-Take once daily in the evening:

- One 10-mg tablet for adults and adolescents 15 years of age and older, One 5-mg chewable tablet for children 6 to
- One 4-mg chewable tablet or one packet of 4-mg oral granules for children 2 to 5 years of age, or One packet of 4-mg oral granules for children 12 to 23 months of age. For exercise-induced asthma-Take at least 2 hours

before exercise, but not more than once daily One 10-mg tablet for adults and adolescents 15 years of age and older

For allergic rhinitis - Take once daily at about the

- same time each day:

 One 10-mg tablet for adults and adolescents
 15 years of age and older,
- One 5-mg chewable tablet for children 6 to 14 years of age,
 One 4-mg chewable tablet for children 2 to
 5 years of age, or
 One packet of 4-mg oral granules for children
- 2 to 5 years of age with seasonal allergic rhinitis or for children 6 months to 5 years of age with

What should I avoid while taking SINGULAIR? If you have asthma and if your asthma is made

worse by aspirin, continue to avoid aspirin or other medicines called non-steroidal anti-inflammatory drugs while taking SINGULAIR. What are the possible side effects of SINGULAIR?

The side effects of SINGULAIR are usually mild, and SINGULAIR were similar in type and frequency to side effects in patients who were given a placebo (a pill

The most common side effects with SINGULAIR

- stomach pain
 - stomach or intestinal upset

 - stuffy nose

 - upper respiratory infection

 - n side effects that have happened with
 - increased bleeding tendency

 - increased bleeding tendency allergic reactions [including swelling of the face, lips, tongue, and/or throat (which may cause trouble breathing or swallowing), hives and itching] behavior and mood related changes [agitation including aggressive behavior, bad/vivid dreams, depression, feeling anxious, hallucinations

- palpitations nose bleed
- diarrhea, indigestion, inflammation of the pancreas, nausea, vomiting
- hepatitis
- joint pain, muscle aches and muscle cramps
- Rarely, asthmatic patients taking SINGULAIR have experienced a condition that includes certain symptoms that do not go away or that get worse. These occur usually, but not always, in patients who were taking steroid pills by mouth for asthma and
- were taking steroid pills by mouth for asthma and those steroids were being slowly lowered or stopped. Although SINGULAIR has not been shown to cause this condition, you must tell your doctor right away if you get one or more of these symptoms:

 a feeling of pins and needles or numbness of arms or legs

 - · a flu-like illness severe inflammation (pain and swelling) of the
- These are not all the possible side effects of SINGULAIR.

Talk to your doctor if you think you have side effects from taking SINGULAIR.

General Information about the safe and effective use of SINGULAIR Medicines are sometimes prescribed for conditi

that are not mentioned in patient information leaflets Do not use SINGULAIR for a condition for which it was not prescribed. Do not give SINGULAIR to other people even if they have the same symptoms you have. It may harm them. Keep SINGULAIR and all medicines out of the reach of children.

Store SINGULAIR at 25°C (77°F). Protect from moisture and light. Store in original package.

This leaflet summarizes information abou SINGULAIR. If you would like more information, talk to your doctor. You can ask your pharmacist or doctor for information about SINGULAIR that is written for

What are the ingredients in SINGULAIR? Active ingredient: montelukast sodium

SINGULAIR chewable tablets contain aspartame, a source of phenylalanine.
Phenylketonurics: SINGULAIR 4-mg and 5-mg chewable tablets contain 0.674 and 0.842 mg

Inactive ingredients:

- · 4-mg oral granules: mannitol, hydroxypropyl cellulose, and magnesium stearate.

 • 4-mg and 5-mg chewable tablets: mai
- microcrystalline cellulose, hydroxypropyl cellulose, red ferric oxide, croscarmellose magnesium stearate.
- 10-mg tablet: microcrystalline cellulose, lactose monohydrate, croscarmellose sodium, hydroxypropyl cellulose, magnesium stearate, hydroxypropyl

What is aethma? Asthma is a continuing (chronic) inflammation of the

bronchial passageways which are the tubes that carry air from outside the body to the lungs.

- Symptoms of asthma include
- shortness of breath
- What is exercise-induced asthma?
- Exercise-induced asthma, more accurately called exercise-induced bronchoconstriction occurs when exercise triggers symptoms of asthma.

What is allergic rhinitis? · Seasonal allergic rhinitis, also known as hay fever,

- is triggered by outdoor allergens such as pollens from trees, grasses, and weeds. Perennial allergic rhinitis may occur year-round and
- is generally triggered by indoor allergens such as dust mites, animal dander, and/or mold spores. Symptoms of allergic rhinitis may include

 stuffy, runny, and/or itchy nose · sneezing

Rx only US Patent No.: 5,565,473

Issued July 2008

MERCK & CO., INC Whitehouse Station, NJ 08889, USA

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Books, Reads that range from self-help to scholarly



How God Changes Your Brain

By Andrew Newberg and Mark Robert Waldman: Ballantine

AUTHORS NEWBERG AND Waldman have written a self-help field guide to the health benefits of spirituality. Just minutes of daily meditation can slow the aging process, build intimacy with family and friends and provide broader rewards even for nonbelievers. It appears that positive thinking is one of the many names of God.



Medicine, Religion **And Health**

Bv Harold G. Koenia: Templeton Foundation Press

KOENIG IS A CO-DIRECTOR OF Duke's Center for Spirituality, Theology and Health. His latest book on the subject offers an overview of research into faith's effect on mental health, cardiovascular disease and mortality, as well as guidelines for health-care professionals on how they can integrate spirituality into the care they offer patients.



Blind Faith: The Unholy **Alliance of Religion And Medicine**

By Richard P. Sloan: St. Martin's Griffin

DRAGGING RELIGION INTO clinical medicine, argues Sloan, is bad for both. Too much of the research is sloppy and funded by folks who have a stake in finding that belief is good for us. The result is bad science, bad medicine-and even bad religion when faith is trivialized by being treated like just another item in the healthcare system's bag of tricks.



Religion and Healing In America

Edited by Linda L. Barnes and Susan S. Sered: Oxford University Press

THIS RICH COLLECTION addresses the multicultural world of spirituality that immigration has created in the U.S. The authors explore healing traditions usually left out of mainstream research into belief and health, such as those with roots in the Caribbean. Mexico and South Asia.

Pilgrimages. When a spa is spiritual enough, thank you very much

- 1 Chiva-Som, Hua Hin, Thailand
- The Rai Maharishi Ayurveda Health Spa Fairfield, Iowa
- Mii Amo Spa at Enchantment Resort,
- Sedona, Ariz.
- Mandarin Oriental Riviera Maya Playa del Carmen, Mexico
- Ten Thousand Waves Santa Fe, N.M.
- Ananda in the Himalayas
 - Rishikesh, India
- @ Canyon Ranch, Lenox, Mass, O COMO Shambhala Retreat
 - Uma Paro, Bhutan

Websites, Online sources for seekers

nccam.nih.gov/health/atoz.htm

The Government on Health Washington weighs in with a guide that

includes an A-to-Z index of topics, including spirituality and health.

beliefnet.com

One-Stop Faith Shop

Explore your faith, and check out tips on health, finance, love and more. Also has blogs, prayers, news, and guidance for contacting your guardian angel.

spirituality-health.com/spirit

Onscreen Magazine

A bimonthly that celebrates the "Soul/Body Connection" and "reports on the people. the practices and the ideas of the current spiritual renaissance," Polls and self-tests too.

webmd.com

The Doctors Speak

Medical site that also covers prayer, spirituality and health topics.

President Obama

The Path to The White House

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Books

Life

□ SOCIAL NORMS □ EDUCATION □ CUBICLE CULTURE □ NERD WORLD



SOCIAL NORMS

The New Dating Game. As finding a mate gets more complicated, some unlikely matchmakers are stepping up

BY BELINDA LUSCOMBE

SOME OF THEM ARE RESPECTED scientists. Some of them are psychologists. At least one of them is a briefly married former TV-morning, show host. A surprising number of them are stand-up comedians. And they all want to give you dating advice. If you're single and

don't wish to be, have they got a TV show/book/scientific theory for you! As if you haven't suffered enough.

According to the most recent census figures, about 84 million Americans ages 20 to 75 are unmarried or separated. Even if only half of them want to find a spouse, that's a nice fat target for the media to aim at in a market where such uniformity of desire is rare. So while dating and mating instructions are probably as old as Australopitheus (Tip 1: "Stand up straighter"), right now the advice-o-meter is running hot. When a coupling manual turned movie—He's Just Not That Into You—is a box office hit. Something's up.

How bad is the dating scene? Bad enough that a production company believes it can find four adults willing to have spouses chosen for them by their friends and family, marry them and allow their subsequent domestic life to be broadcast on CBS. (Because what could possibly go wrong in your first year of wedlock

Depends Whom You Ask. Some of the new relationship gurus' advice is scientific, some practical, and some just plain weird



Helen Fisher: Biological anthropologist, divorced Qualifications: Author of five books on mate selection, Rutgers University professor Book: Why Him? Why Her?

Sample advice: If your ring finger is longer than your index finaer, vou're probably a "director"-confident, drawn to you.





Steve Harvey: Comedian, TV and radio personality. married three times

Qualifications: "I'm not a relationship expert," he says. "I'm a man expert."

Book: Act Like a Lady. Think Like a Man

Sample Advice: Women should do what Ford did when Harvey worked at the car company—wait until the man has been around for 90 days before giving him any benefits.





Whitney Casey: Emmywinning journalist, starter marriage lasted nine months

Qualifications: Has written a datina column since 2007

Book: The Man Plan

Sample Advice: "If a woman can't differentiate between Luke Skywalker and Han Solo, chances are she won't last long in a man's life."





Michael Somerville: Stand-up comedian, never heen married

Qualifications: Writes a dating column for Glamour magazine

Show: Wingman

Sample Advice: If you see a cute quy at a bar, send him a drink. But if you see a cute auv wearing a sweater, it probably means he already has a airlfriend.



to a stranger?) Other lonely hearts have already submitted to having their mate-finding woes aired on cable. Yes, there have been dating shows before, but none quite so DIY as three offered by FLN, the network formerly known for fancy cooking and curtainchoosing. Wingman, in which comedian Michael Somerville acts as a dating sidekick, premiered Feb. 10. How to Find a Husband, a British import,





To see what works and what crashes and burns, go to time.com/dating

arrives in April. The network is also developing Love Taxi, in which a cab driver plays matchmaker. Dating, camera, New York City taxi-the discomfort trifecta.

Oddly enough, Wingman's Somerville is not the nation's premier comedian turned love guru. That would be Steve Harvey, whose Act Like a Lady, Think Like a Man is the best-selling nonfiction book in the nation, according to the Wall Street Journal, Harvey's advice is old-fashioned and frank: Women are single because they have lowered their expectations of men and because they have not understood the three things men need-support, lovalty and

"the Cookie," the author's euphemism for ... oh, you know what it's for, "I told the publishers I could have said everything I had to say in about 35 pages," the twice-divorced Harvey notes. "Because we're guys. We're that simple."

Straightforward as it is, Harvey's book reads like Jacques Derrida compared with Whitney Casey's The Man Plan. A former host of Great Day Houston, Casey is blond, divorced and telegenic enough to get a blurb for her book from Lance Armstrong, the champion bad boyfriend. She polled 250 men to come up with such insights as, Men get confused by shiny jewelry and big handbags, don't like it when hair smells of fajita and are impressed by TV sets hung on the wall.

Has it come to this? Is dating really that hard? Sociologists have long agreed that the two key factors of mate choice are proximity and timing. We choose from those around us, generally two to five years after we finish our education. But at least one of those pillars is eroding. Online dating has meant that our pool of potential mates is much bigger. The opportunity cost of giving up on a potential suitor is lower. And it's more work to find the

wheat in all that chaff. This is made more complicated by our new living patterns, says New York

University sociologist Dalton Conley, whose book Elsewhere, U.S.A. examines how our work and domestic realms collide, "Social proximity is more defining now," he says, "It's class- or occupation-based. Doctors marry doctors instead of nurses." Conley points out that in the past 30 years, the social norms for mate selection have completely flipped: there are fewer prohibitions on whom you can marry, most women work outside the home, and the digital dating landscape is a whole new terrain. "The last change of this significance was the introduction of the Pill," he says.

In times of upheaval, nothing offers safe harbor like science. That's where Helen Fisher comes in, A biological anthropologist at Rutgers University, she combed through reams of genetic literature and analyzed the answers to 40,000 surveys she conducted on the dating site Chemistry.com, for which she is a paid adviser. Her research led her inside the biological mechanisms of mate choice. In Why Him? Why Her?, Fisher posits that there are four broad temperament types-"explorer," "builder," "director" and "negotiator." Each of these types is expressive of a different neurochemical system: dopamine and norepinephrine; serotonin; testosterone; and estrogen. Using the data from Chemistry.com, she observes which type is drawn to which.

"When you're on a date, if you understand your primary type and the type of person whom you're going out with," suggests Fishen, "you can bet ter reach them and create more intimacy." (One telltale sign: the ring fingers of directors are longer than their index fingers, In the future, might singletons be able to use a blood test to zero in on prospective mates, saving us a lot of effort and enabling us to wear jew-elry? "Possibly," she says.

Until then, try spending Valentine's Day mounting your flat screen on the wall. It can't hurt. SOCIAL NORMS

Are Hugs the New Handshakes? From the White House to *The Real World* to your office, greetings are getting warm and fuzzy

BY LAURA FITZPATRICK

IF WHITE HOUSE ETIQUETTE IS ANY INDICAtion, you should be getting a random hug soon. The Obama family was always cuddly on the campaign trail, and last month the President bestowed no fewer than nine hugs on senior male staffers at a single meeting.

The Hugger in Chief didn't start the trend. At work and at school, even on first introductions-at least among the latest inhabitants of The Real World-the hug is gaining ground on the handshake. There are many iterations, including the hip-hop hug (a manly shake-and-squeeze combo), the ass-out hug (an awkward ordeal that precludes genital contact) and, for someone you're really close to, the full frontal (your standard bear hug). The big squeeze has been on the rise at least since 2006, when the Free Hugs campaign exploded worldwide. It got another boost last year, when hikers from Ohio and Pennsylvania started the Hugs for Humanity project, walking across America to deliver a million hugs. And yet another when John McCain and Sarah Palin embraced, however stiffly, at campaign rallies.

Why have we caught the hug bug? Mentalhealth professionals cite everything from increasing population density to community spirit among millennials. Some theories point to 9/11 bringing the country together and to The Sopranos showing that tough guys can hug too. More recently, the hit show Entourage prompted fans to "hugi tout, bitch" (a tagline now immortalized on "shirts). "I'd always welcome a hug", says Aaron Schutte, a senior at Iowa's Wartburg College and founder of the 2,500 member Facebook group I Love a Good Hug. "Why not?"

Of course, hugging has its haters. Schools in a handful of states have banned the gesture, with a middle-school principal in Oak Park, Ill., explaining back in 2007 that groups of students—typically girls—were jamming the hallways with "extreme hugging" and making other kids late for class.

And let's not forget the increasing popularity of workplace hugs, which can be especially confusing, notes Susan Dunn, an executive coach in Dallas. "I have to say, 'O.K., there's a hug, and then there's a hug," she notes, the kind that can get HR involved. Nearly half the respondents in an October survey on the business-networking site Greenlight Community copped to hugging co-workers. But with the other half still greeting palm to palm, the consequences of a mismatched gesture can be painful-and not just because of the possible harassment suit. On the site Miss(ed) Manners, etiquette blogger "Dave" recalled extending a hand to a client who simultaneously went for a hug. The unfortunate outcome? "I punched her right in the crotch."



THE FULL FRONTAL

Total body contact, heartto-heart embrace and firm
squeeze. For parents, children
and good friends



THE ASS-OUT HUG Nothing touches below the shoulders. Reserved for the office, bad dates and references to Vince Vaughn



THE HIP-HOP HUG

A.k.a. the man hug and the
hetero hug. Shake with right
hand and hug with left, two
slavs on the back

Educators are digging in their heels in three states. Why random tests are a bad idea

BY JOHN CLOUD

ONE COULD ARGUE THAT SOME people—painters, fashion models, rock stars—perform better under the influence. But other jobs should go only to the perpetually sober. We don't want our chemical weapons handlers to be pulling a Michael Phelps on the job, which is why employees in high risk positions are subjected to random drug tests.

But what about people who work in less perilous, if equally unpredictable, environments-say, with kids in public schools? Should teachers be randomly tested too? Yes, says Linda Lingle, GOP governor of Hawaii, where the teachers' union agreed in 2007 to negotiate the terms of a new drug-testing program in exchange for more pay. Now some Hawaii teachers are resisting, citing the cost of the tests to the schools and to their right to privacy. Teacher-testing has also become the subject of recent court cases in North Carolina and West Virginia.

But aside from the legal issues, one important question hasn't been addressed so far: Does random drug-testing actually reduce drug use?

Probably not. Research shows that drug-testing is an effective deterrent in orderly, full-immersion settings like a military base or housing for élite athletes. But several studies have shown that drugtesting doesn't work well in schools. In the biggest study to date, issued in 2003, a University of Michigan team that looked at 804 middle and high schools found that random student drug-testing tends to reduce marijuana use slightly (about 5%) but actually increase



Pee is for privacy A judge ruled random teacher-testing unconstitutional

the use of other drugs (about 3%). The authors theorize that drug users may think prescription and other narcotics will be harder to detect by urinalysis, so they switch.

Even after the researchers controlled for socioeconomic differences among students and schools, they found no statistically meaningful difference in drug-use rates among kids who attended

We don't want our chemicalweapons handlers to be pulling a Michael Phelps on the job schools that randomly drugtested and those that didn't.

Still, the behavior of kids doesn't neatly correspond to that of their teachers, who will fear losing their jobs if caught. Which leads to a more fundamental question: If we're serious about drug enforcement, why not subject every American to random testing?

One answer is the Constitution: a West Virginia judge last month declared random drugtesting of teachers to be unreasonable searches. (A North Carolina ruling that safety concerns trump teachers' right to privacy is under appeal.) The other issue is cost. In the West Virginia case, the school district would have to shell out



URINALYSIS

Drop in marijuana use at schools that test students for

3%

Increase in student use of other drugs, attributed to random testing

18th

Rank, out of 19 professions, of educators in a survey on recent use of illegal drugs

about \$37,000 a year for urine tests, which could pay for an entire teaching position.

Meanwhile, the evidence suggests that drug use among teachers is not exactly a pressing problem. In 2007, a major study by the Federal Government showed that educators rank 18th out of 10 listed professions in the use of illicit drugs. (Those who work in food service, arts, retail and "information" services-like, um, journalists-were the major offenders.) Only 4% of educators surveyed confidentially reported use of illegal drugs in the previous month-still too many, but hardly an epidemic requiring enormous expense to fix.

CUBICLE CULTURE

Getting Jumpy at Work. Who knew corporate team-building still existed? The people who run kids' bouncy castles



MONKEY BUSINESS

1959

Year that Space Walk, the first inflatable fun house, was invented

\$34 BILLION

Estimated U.S. spending on employee-training consultants in 2007

\$2,000

Estimated cost of a 2-hr., 20-person corporate-bonding session among the inflatables



BY BELINDA LUSCOMBE

FULL-GROWN HUMANS, AT least those not in the NBA, do not jump. It's not just that it's jarring and exhausting. It's one of those childish things people put away about the time they start paying taxes and stop singing in public.

But this is America, where one person's taboo is another's business opportunity. Hence the arrival of the newest weapon in the corporate team-building arsenal bouncy castles. Fump It Up (PIU), the nation's biggest chain of indoor inflatable playgrounds—those facilities with enormous, brightly colored balloon like structures that usually house frenetic children—is now offering business-education programs.

Team-building, which some participants regard as re-education's perkier cousin, takes workers out of a familiar environment to coax them to think differently, view one another differently or just let off steam. PIU's version operates on the intriguing premise that intra-office communication improves when employees barrel down a 20 ft. (about 6 m) slide or whack one another with inflatable jousting bats.

Of course, the folks at PIU have not gone into this airly. The head office worked with team-building experts for a year to devise a handbook that is to be sent to all 17x PIU franchises around the country. For franchise owners, it's a win-win. They can usually fill their facilities with hordes of birthday cake rueled kids on weekends and even after school. But business sags considerably during office hours. Amone the team building the sent purpose the sent production of the sent purpose the sen

activities: "Leading the Crowd Playfully" (to break the ice), "Tag Team Climbing" (to improve cooperation) and "Kneeling Basketball" (to learn to deal with downsizThe new corporate ladder In Tempe, Ariz., Whelan helps workers get to the top

ing, perhaps?). But will morale really improve if the 9-to-5 crowd spends a little time bouncing around—in socks, in full view of the boss? "There's always a hesita-

tion with team-building."

says Pat Whelan, a corporatebonding veteral who is working with PIU to run the courses in several states. But the childishness of the exercises, he adds, is the point. "When you were a kid, you didn't have to like all the other kids you played with. You just played with. You just played." PIU's activities, he says, sure beat the trustbuilding exercise one company asked him to run using a plank between two hot air balloons. He declined.

PIU's corporate program

was officially launched in December, but even before then, a few firms had taken the ahem, leap. Since 2005, lody Wallace; who owns a PIU franchise in Ohio, has hosted about two events a month for local divisions of Procter & Gamble, GE, Yellow Book and Ryan Homes. She says she got the idea partly from watching parents sheepishly try out the equipment at their children's parties. "They got just as excited as the kids," she says.

While the American Society for Training & Development reports that spending on outsourced corporate education is on the decline, a session at PIU—at about \$3,000 a pop—is cheaper than, say, a day of golfing. And, depending on your handicap, no more humiliating. Plus, it gives companies a rare opportunity: to guarantee their employees a soft landing.



Facebook Is for Old People

It was designed for college kids. But it took legions of people their parents' age to fulfill its ultimate destiny



FACEBOOK IS FIVE. MAYBE YOU didn't get it in your news feed, but it was in February 2004 that Harvard student Mark Zuckerberg, along with some classmates, launched the social network that ate the world. Did he realize back then in his dorm that he was witnessing merely the larval stage of his creation? For what began with college students has found its fullest, richest expression with us, the middle-aged. Here are 10 reasons Facebook is for old fogies:

1. Facebook is about finding people you've lost track of. And. son, we've lost track of more people than you've ever met. Remember who you went to prom with junior year? See, we don't. We've gone through

multiple schools, jobs and marriages. Each one of those came with a complete cast of characters, most of whom we have forgotten existed. But Facebook never forgets.

2. We're no longer bitter about high school. You're probably still hung up on any number of petty slights, but when that person who used to call us that thing we're not going to mention here, because it really stuck, asks us to be friends on Facebook, we happily friend that person. Because we're all grown up now. We're bigger than that. Or some of us are, anyway. We're in therapy, and it's going really well. These are just broad generalizations. Next reason.

3. We never get drunk at parties and get photographed holding beer bottles in suggestive positions. We wish we still did that. But we don't.

4. Facebook isn't just a social network: it's a business network. And unlike, say, college students, we actually have jobs. What's the point of networking with people who can't hire you? Not that we'd want to work with anyone your age anyway. Given the recession-and the amount of time we spend on Facebooka bunch of hungry, motivated young guns is the last thing we need around here.

5. We're lazy. We have jobs and children and houses and substance-abuse problems to deal with. At our age, we don't want to do anything. What we want is to hear about other people doing things and then judge them for it. Which is what news feeds are for.

6. We're old enough that pictures from grade school or summer camp look nothing like us. These days, the only way to identify us is with Facebook tags.

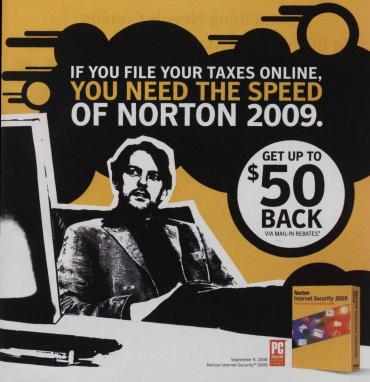
7. We have children. There is very little that old people enjoy more than forcing others to pay attention to pictures of their children. Facebook is the most efficient engine ever devised for this

8. We're too old to remember e-mail addresses. You have to understand: we have spent decades drinking diet soda out of aluminum cans. That stuff catches up with you. We can't remember friends' e-mail addresses. We can barely remember their names.

9. We don't understand Twitter. Literally. It makes no sense

10. We're not cool, and we don't care. There was a time when it was cool to be on Facebook. That time has passed. Facebook now has 150 million members, and its way cooler not to be on Face-

fastest-growing demographic is 30 and up. At this point, it's book. We've ruined it for good, just like we ruined Twilight and skateboarding. So git! And while you're at it, vou damn kids better get off our lawn too.



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The Education Center at The Wall: America's Legacy of Service will celebrate the Americans who answered their country's call during the Vietnam War and in all of America wars. Being built adjacent to the Lincoln Memorial, this unique Center will add a new dimension to the National Mall provides a section of the second of the Section of the National

The Center will put faces to the more than 58,000 names inscribed in the edgand black grante of The Wall. And It will do even more. Through letters, photos and artifacts that have been left at The Wall through the years, this Center will tell the stories of the brave men and women who tought for their country. It will show the images of people who fought throughout our nation's history, reminding visitors of the legacy of service that began at Lexington Green in 1775 and continues to the

We owe our freedom to those who have served in harm's way. The values of loyalty, duty, respect, service, honor, integrity and courage will be highlighted throughout the Center. These values are embodied by those whose names are inscribed on the Vietnam Veterans Memorial and all who have served in our nation's military.

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Wellness

MOTIVATION DIET



MOTIVATION

Making Good Health Easy. Having trouble sticking with those wholesome choices? Maybe your boss can help

BY LAURA BLUE

IT'S SEVEN WEEKS INTO THE NEW YEAR. Do you know where your resolution is? If you're like millions of Americans, you probably vowed to lose weight, quit smoking and drink less in 2009, You kicked off January with a commitment to long-term well-being—until you came face-to-face with a cheeseburger. You spent a bundle on a shiny new gym pass. Turns out, if

wasn't reason enough for you to actually use the gym.

People can make poor decisions when it comes to health—despite their best intentions. It's not easy abiding by wholesome choices (giving up French fries) when the consequences of not doing so (heart disease) seem so far in the future. Most people are bad at judging their health risks smokers generally know cigarettes cause cancer, but they also tend to believe they're less

likely than other smokers to get it. And as any snack-loving dieter can attest, people can be comically inept at predicting their future behavior. You swear you will eat just one potato chip but don't stop until

the bag is empty.

So, what does it take to motivate people to stick to the path set by their conscious brain? How can good choices be made to seem more appealing than bad ones? The problem stumps doctors, public-health

Illustration for TIME by Jonathon Rosen

Wellness 1

American businesses have a particular interest in personal health, since worker illness costs them billions each year in insurance claims, sick days and high staff turnover. A 2008 survey of major U.S. employers found that 64% consider their employees poor health decisions as erious barrier to affordable insurance coverage. Now some companies are tackling the motivation problem head on, using tactics drawn from behavioral psychology to undge their employees to get healthy.

"It's a bit paradoxical that employers need to provide incentives for people to improve their own health," says Michael Follick, a behavioral psychologist at Brown University and president of the consultancy Abacus Employer Health Solutions.

Paradoxical, maybe, but effective. Consider Amica Mutual Insurance, based in Rhode Island. Amica seemed to be doing everything right: it boasts an on-site fitness center at its headquarters. It pays toward

'To get [an] overweight, four-pack-a-day smoker to change behavior, it's going to take a... bigger incentive than for a 22year-old who's healthy.'

-BILL SIMS, BEHAVIOR CONSULTANT

Weight Watchers and smoking-cessation help, gives gift cards to reward proper prenatal care and offers free flu shots each year. Still, in the mid-200s, about 7% of the company's insured population, including roughly 3,100 employees and their dependents, had diabetes. "We manage risk. That's our core business," says Scott Boyd, Amica's director of compensation and benefits. But diabetes-related claims from Amica employees had doubled in four years. "We thought, O.K.," Boyd says now, "we have to manage these high risk groups a little better."

The behavioral psychologists from Abacus Employer Health Solutions advised Amica to create a separate wellness program for its diabetic employees, based on their specific needs and unique barriers to care. Today Amica covers all copays on necessary diabetes drugs but only for patients who attend five key annual preventive-health checkups, including an eve exam and a foot exam. Within eight months of the program's launch in 2008, about half of Amica's diabetic employees were enrolled. It was a win-win situation: members had saved nearly \$35,000 in outof-pocket expenses, and Amica's healthcare costs on compliant members dropped 50% within a year. Best of all, unlike the nonparticipants, not one of the compliant members had landed in the hospital

There's nothing revolutionary about using incentives-financial carrots and sticks that reward and punish behaviorto coax workers toward good health. But behavior experts note that not all perks motivate all people. "To get a high-risk, overweight, four-pack-a-day smoker to change behavior, it's going to take a whole lot bigger incentive than for a 22-year-old who's healthy as a horse," says Bill Sims, president of an eponymous behaviorchange consulting firm. Amica's diabetic employees weren't tempted by a subsidized gym membership. But they did respond to a plan that focused on behaviors they could manage and that offered appropriate rewards-free meds-to reinforce them.

But good options and good incentives are not always enough. Sometimes people still need a helpful cue about their best choice, says Richard Thaler, a behavioral economist at the University of Chicago and author of Nudge: Improving Decisions About Health, Wealth and Happiness. Faced with a vast array of alternatives, many people-paralyzed-pick nothing, according to Thaler's research. "Sending people a bunch of options-that they can join health clubs or Weight Watchers or something-is probably not going to work," he says. What works is making good health effortless-say, by having a nurse come into the office to administer vaccines and allowing workers to opt out if they're not interested.

interested.

At Amica Mutual, Boyd awaits the forthcoming results of employees' healthrish assessments, conducted last fall with high staff participation, thanks to a program that allowed workers to take medical tests on-site. Boyd asks, "What are some of the other chronic conditions our employees have? Do they need to work on cardiovascular? Depression? Asthmatype issues?" Whether it's a persistent illness or a failed New Year's resolution, maybe a well-placed nudge can help get them back on track.



Lunchtime workout Annie Oster, an Amica Mutual employee, leads an exercise class on-site

INCENTIVES

Bringing Wellness to the Workforce

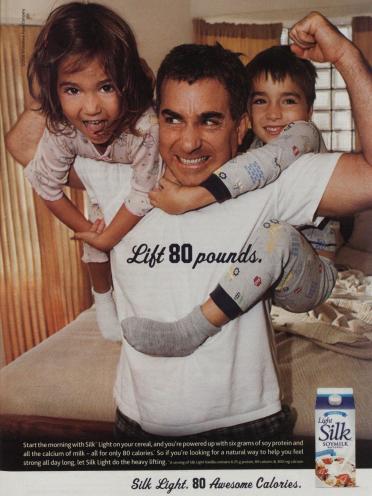
A subsidized gym membership may not be enough to motivate everyone to work out. But psychologists and successful companies have a few tricks for improving America's health:

1) Find out who's at risk. Run employee-health-risk assessments or simply review the insurance data to see what conditions are a consistent problem for people.

2) Tailor incentives. A hypertensive 55 year old won't always respond to the same incentives as a pregnant 25-year old will. Understanding people's needs and the particular barriers to their good health makes for an effective and money-saving wellness program.

3) Offer rewards. Believe it or not, cash doesn't inspire everyone. Research shows that giving tangible luxury gifts, like iPods or massages, can motivate greater behavioral change than giving even money.

Wellness 2



Eat Your Greens. Preparing meals with a small carbon footprint is good for the climate and your waistline

RY RRYAN WALSH

IF YOU REALLY WANT TO GO GREEN, THE conventional thinking goes, buy a hybrid. Practically speaking though, there is a faster and cheaper option: shift to a low-carbon diet. The meal plan of the average American family accounts for 2.8 tons of CO, emitted annually, compared with 2.2 tons for driving. Worldwide agriculture contributes some 30% of global greenhouse-gas emissions, far more than transportation. So when it comes to cutting your carbon footprint today, the truth is that what you eat is as important as what you drive. "If you can't buy a Prius," says Jonathan Kaplan of the Natural Resources Defense Council, "you can certainly eat like one."

And here's better news: eating green is good for you. The very foods with a high carbon cost--red meat, pork, dairy products, processed snacks-also tend to be laden with fat and calories. A green diet would comprise mostly vegetables and fruits, whole grains, fish and lean meats like chicken-a diet that's eco- and waistline friendly. "[Eating green] can make a big difference for the climate and be more healthy," says Doug Gurian-Sherman, senior scientist for the food and environment program at the Union of Concerned Scientists.

It may be hard to believe that a meal at McDonald's produces more carbon than your trip to the drive-through-until you consider just how vast and energyintensive the global food system is. More than 37% of the world's land is used for agriculture, much of it ground that was once forested-and deforestation is a maior source of carbon. The fertilizer and machinery needed on a modern farm also have a large carbon footprint, as does the network of ships and trucks that brings the food from the farm to your plate. On average, it takes seven to 10 times as much fossil-fuel energy to produce and ship food as we get from eating it.

The most efficient way to shrink the carbon footprint of your menu is to eat less meat, especially beef. Raising cattle takes a lot more energy than growing the equivalent amount of grains, fruits or vegetables: most produce requires about 2 calories of fossil-fuel energy to cultivate per I calorie of food energy; with beef, the ratio can be as high as 80 to 1. What's more. the majority of cattle in the U.S. are reared on grain and loads of it-670 million tons in 2002-and the fertilizer used to grow that feed creates separate environmental problems, including surface runoff that leads to dead zones in coastal waters like the Gulf of Mexico. Those grain-fed cattle then belch methane, a greenhouse gas that is 20 times as potent as CO2. "Reducing beef is the first step to a green diet," says Michael Jacobson of the Center for Science in the Public Interest (CSPI).

That one step can make an enormous impact on the atmosphere and your arteries. A 2005 study by the University of Chicago found that one person switching from a red-meat-based diet to vegetarianism could save about the same amount of CO, as trading in a Toyota Camry for a Toyota Prius. There's no shortage of evidence that reducing red meat-Americans eat more than 60 lb. of dead cow annually-is also good for your health. CSPI estimates that replacing one 3.5-oz. serving of beef, one egg and a 1-oz. serving of cheese each day with an equivalent amount of fruits, vegetables and grains would cut your daily fat consumption and increase your fiber intake, all while conserving 1.8 acres of cropland and reducing animal waste by 11,400 lb. each year.

And while locally grown has become some eco-eaters' mantra, what you eat

'Focus on eating lower on the food chain, with more plants and fruits and less meat and dairy. It's that simple.'

KATE GEAGAN, DIETITIAN AND AUTHOR OF GO GREEN GET LEAN

matters more than where it comes from, Our food travels from 1,500 to 2,500 miles on average from farm to supermarket, but that journey typically accounts for just 4% of a food's carbon footprint, "Focus on eating lower on the food chain, with more plants and fruits and less meat and dairy," says Kate Geagan, a dietitian and author of the forthcoming book Go Green Get Lean. "It's that simple." Installing solar panels or buying a hybrid may not be possible for many of us, but we can change today what goes into our bodies-and those decisions matter, for the health of our planet and ourselves.

Feeding the Earth. Foods with a low carbon cost tend to be healthier as well

Foods that require a lot of energy to produce-like beef-leave bigger carbon footprints











4 oz. serving of	Steamed Vegetables	Pasta	Grilled Chicken	Cheese	Grilled Steak
Calories	74	150	188.5	456	347
Grams of Fat	0.13	1.2	4.17	37.6	24.5
Carbon Footprint	0.18 lb.	0.39 lb.	1.27 lb.	2.26 lb.	10.5 lb.



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Arts



□ VIDEO GAMES □ BOOKS □ MOVIES □ MUSIC □ SHORT LIST



VIDEO GAMES

Wheel Life. It's famous for being violent, but *Grand Theft Auto* is also a supremely ambitious experiment in storytelling

BY LEV GROSSMAN

WHEN GRAND THEFF AUTO IV: LIBERTY City came out on April 29 last year, it sold 3.6 million copies in one day. By the end of the week, sales were up to 6 million, for a total take of about 4500 million. Which means, if you go by that number (and Guinness does), that Grand Theft Auto IV owns the biggest opening of any entertainment property in history. In comparison, Printer of the Caribbean 3 took in a

paltry \$400 million during its first week. And Grand Theft Auto IV wasn't even the most commercial entertainment option on the bill. As Dan Houser, one of the prime movers behind the Grand Theft Auto series, points out, the game opened opposite Speed Racer and Iron Man. "I thought that was an interesting moment," says Houser, an affable, shaved headed Londoner who talks so quickly that he's almost untranscribable. "You have a video game about an immigrant discovering himself

and losing himself in America—and that's the video game—and then the movies are about a superhero in a metal suit and a car based on a cartoon."

He's right: it is interesting. It's one of the enduring paradoxes of the Grand Theft Auto games—or maybe the paradox lies in the culture around them?—that people who dort play them think of them as the epitome of mindless virtual violence, whereas in fact they are, with each installment, more and more radical and

sophisticated experiments in storytelling. Depending on whether or not you're a gamer, this statement is either preposterous or so staggeringly obvious that it's al-

most not worth making.

Grand Theft Auto IV tells the story of Niko, a haunted veteran of an unspecified, nameless East European conflict who washes up in Liberty City looking for a new life, (Liberty City is, like Gotham, a darker version of New York City, with satirical flourishes. The Statue of Liberty has been replaced by the Statue of Happiness, which holds aloft a coffee cup instead of a torch.) Over the course of the game. Niko slugs, shoots and carjacks his way up (or maybe down) the ladder of the criminal underworld. As he does so, he gradually realizes that his new life is no less senseless and violent than his old one-turns out the Old World and New World aren't that different. The New World just has better marketing. America was Niko's last illusion, and you watch it shatter at high speed and in high definition.

One of the challenges of telling stories in video games is that the entire medium is subject to technological upgrades on a regular basis. Mastering it requires surfing a learning curve that is steep and, so far, infinite. With the previous generation of hardware, for example, characters' faces were too flat to sustain real closeups, and there just wasn't enough horsepower to support a lot of Stoppardian banter. "We simply couldn't stream in much dialogue, 'cause it was so hard to stream the world in on PlayStation 2," Houser explains, "whereas now we can have the characters constantly talking to you. The emotions on PS2 had to be quite black and white. Now we can get a little bit more gray in there."

That world has become so complex that Houser and his team have to use diagramming software to keep list various components straight. "It's an absolute bastard, because you're trying to track 50 characters," he says. "And the thing that makes it more complicated than, say, a T'v show or a novel is that you as the player have choice. You can always do any of five or six things at once." Imagine Victor Hugo trying to write Les Missriables with Jean Valjaen under the reader's control and you'll get some idea of what Houser is up against. The player is both the audience and the ghost—a mischievous pollergeis—in the machine.

In the game's newest installment, Grand Theft Auto IV: The Lost and Damned, which will be released on Feb. 17, Houser and his team have ratcheted up the complexity even further. Instead of extending Niko's story laterally by adding a straightup sequel, they're drilling down into it vertically: they picked a minor character The bikers in The Lost and Damned have an air of faded grandeur that's borderline Faulknerian. They're emblematic of an America in decline



Dan Houser

from Liberty City, a biker named Johnny, and created a story around him that takes place simultaneously with Niko's, weaving across and over and through it.

At the start of the game, Johnny is acting as the leader of a biker gang called the Lost while the real boss, Billy, is in court-ordered rehab. When Billy gets out, a power struggle ensues, Johnny and Billy have different visions for the gang, Johnny is a tough guy, but he's got a cool head; Billy, who looks like Ron Perlman and talks like Dennis Hopper, is the wild man who wants to push the Lost deeper into drugdealing and gang warfare.

There's a tragic edge to these men. The great days of the biker gang, if there ever were any, are behind us, and deep down, you sense that the Lost know it. That knowledge gives the men an air of faded grandeur that's borderline Faulknerian. In their lameness, their expired '7:05-era cool, they're emblematic of an American in decline. 'The whole thing was meant to feel almost like they're living on past glory,' Houser says. 'They think they're the last true Americans, the outlaws, the fee? 'But like Niko—who appears periodically in Johnny's story and is an uncanny presence, since he's now outside the play-

er's control—Johnny watches his fantasy deconstructed around him by main force. The further outside the law he goes, the more he sees that he's just as trapped as he ever was. "He's no freer than a guy who goes to an office every day," Houser says. "He's the same as a waiter. He thinks he's different, but he's not."

You can look at the whole CTA series as sustained fictional inquiry into the myth of the great American badass—the criminal, the gangsta, the made man, the outlaw. It's a loving inquiry, but it has a consistent critical distance, an outsider's point of view. And no wonder the games aren't created by Americans at all. Houser, a Brit, is based in New York City, but most of the work gets done by Rockstar North, a team of Scots based in Edinburgh.

Freedom isn't a problem for Houser. As a storyteller, he feels as though he's lucked into the lawless, Wild West period of video games. "It's not academicized," he says. "There's no orthodoxy on how things are done, so we can do whatever we want. We make it up as we go along!" As for the ongoing debate about whether games are art, he couldn't care less. That's what critics get paid for. "As soon as we get told, 'Yes, games are high art. They're almost as high as painting and slightly less than dance,' it's over. Freedom is dead at that point. Then the argument just becomes about people's egos. And my ego doesn't need to be told I'm an artist, I hate myself already!"

It's freedom that gives games their distinctive character as a storytelling form. They grant players the freedom to make choices rather than frog-marching them through the action. But therein arises a contradiction: in order to feel as if they're really interacting, players have to believe they can truly go anywhere and do anything in Liberty City. At the same time, in order for a story to get told, they must be gently but firmly stage-directed through the plot. "You've got this beautiful 3-D world that lives," Houser says, "and it's got all these background characters and its own Internet service and its own TV shows and all these other things that you can go and do and have wash over you. And you've got this story. It's about find ing a balance between letting the player wander off and find stuff to do and then sucking them back in.

It's aquintessentially American conundrum wit is mall: the right to liberty against the rule of law. Too many rules, and you feel like a puppet. Too few, and you're stuck wondering what you're doing there. "You want to avoid that basic fear of terrifying existential crisis," Houser says. "You don't want to put that into the game." There's enough of that in real life.

The Man Who Fell to Earth. A new biography asks, How did America's

weirdest literary genius get that way?



FIRST LINE

Find a copy of John Ashbery's Three Poems, read it, buy a bottle of wine, go home, sit in front of the drink the wine. don't sleep, and produce, by dawn, twelve pages of Ashbery

BY LEV GROSSMAN

AMONG MEMBERS OF MY FAMILY, the word bath is pronounced "baff." It's not that we have some hereditary speech defect or obscure regional accent. It's because at one point or another, we all read Donald Barthelme's novel Snow White, a retelling of the classic fairy tale, and became obsessed with it. In Barthelme's version, the seven dwarfs say "baff" instead of "bath." I don't know why. But now we do too. (The dwarfs also sleep with Snow White and sell Chinesethemed baby food for a living. They still say "heigh-ho," though.)

There aren't many writers who have ascended into the literary ionosphere and then fallen back

down to earthly obscurity with the nose-bleeding steepness of Barthelme. In the 1970s, he was considered the future of literature, and he still has fanatical supporters, my family being Exhibit A. But mostly he's regarded as a dead, twisted branch on the evolutionary tree of American letters. The first major biography of him, Tracy Daugherty's Hiding Man (St. Martin's; 581 pages), should help correct that.

Reading Barthelme, you'd think he crawled from the steaming

Reading him, you'd think he crawled from the wreckage of an asteroid



Quixotic Don Rarthelme's stories trade character and plot for his unique humor wreckage of an asteroid that originated in the outer solar system. In fact, he grew up in Houston. Born in 1931, the son of an influential architect, he was a good-looking, headstrong kid with ironic evebrows like circumflex marks. He was restless and rebarbative, full of jittery, sarcastic energy and the kind of confidence that forms only around a tiny seed of insecurity. After experimenting with college, journalism and marriage in Houston, he got sick of the provinces and lit out for New York City at 31.

Manhattan in the '60s was afizz with folk rock, Pop art and Abstract Expressionism. Soon it was afizz with Barthelme too-the New Yorker picked up on his strange genius and provided a very conventional venue for his very unconventional fiction. Barthelme wasn't interested in plots or characters. He confabulated his stories out of different strains of languagephilosophy, psychology, scientific jargon, advertising, adventure stories-which he then crashed into one another, demolition-derby style. to demonstrate how hilariously inadequate they were for describing the world around us. In "Paraguay." for example, he employs the language of industrial production as art criticism: "Sheet art is generally dried in smoke and is dark brown in color. Bulk art is air-dried, and changes color in particular historical epochs." (Barthelme quotes lose some of their magic out of context, like a colorful shell removed from a tide pool.) In Snow White-to which the New Yorker devoted almost an entire issue in 1967—the heroine sighs. "Oh I wish there were some words in the world that were not the words I always hear!"

A prodigious smoker and drinker, Barthelme died in 1989 of throat cancer, having already seen critics begin to dismiss him as a novelty act. In truth, the mistake we made with Barthelme was expecting him to be the beginning of something. He was the end of something-the green flash in the brilliant sunset of modernism. But in his ceaseless reconfiguration of broken words, he gave voice to our longing for unbroken ones and freed us to go off in search of them-like the dwarfs in Snow White who, on the novel's final page, "DEPART IN SEARCH OF A NEW PRINCIPLE HEIGH-HO."

MOVIES

And the Emmy Goes To ...

Once again, Hollywood has nominated little films for its big awards. No, not Slumdog Millionairethat's a breakout hit—but worthy miniatures like Frost/Nixon that look so good on the small screen, they ought to be up for Best TV Special

BY RICHARD CORLISS

THE MEMBERS OF THE MOtion Picture Academy are still filling out their ballots, but right now the Anglo-Indian melodrama Shumdog Millionaire is the strong favorite to win the Oscars for Best Picture, Directing and Adapted Screenplay. It has already snagged top prizes from the producers', directors', writers' and actors' guilds. It's also earned nearly \$80 million at the domestic box office-far more than the combined take of three of its Best Picture rivals, The Reader, Frost/Nixon and Milk, (The Curious Case of Benjamin Button, which absent Slumdog might have been the film to beat, has grossed more than \$120 million.) Though set in Mumbai, Shumdoa has become a new American idol. The other films may as well sign up for Biggest Losers Ever.

All five finalists are fine films. But The Reader, Frost/ Nixon and Milk aren't so much movies as TV movies; sensitive explorations of major political themes, little pictures on big subjects. It's the stuff more likely to show up on HBO than at the AMC multiplex. Why does the Academy keep citing these (excellent) little movies over the (excellent) big ones, whose scope and excitement can't be duplicated on the small screen?

One reason is that Academy

members are a tad older than the target audience for actionadventures, however elegantly crafted. It's not that Hollywood folk don't get these films; after all, they made 'em. It's that they don't think the grand-scale technical skill lavished on a Dark Knight or an Iron Man is as honorable as the spectacle of two guys talking-as long as one of them is Richard Nixon.

Really, any old-timer will do. Except for Slumdog, all the Best Picture finalists are set wholly in the past. Aaah, Harvey Milk. Oooo, Nazis! Members feel simpatico to films that remind them of when they were actively engaged in politics-and in moviegoing.

Moviegoing is exactly what separates the audience from the Academy. You, dear ordinary cinephile, go to a theater and sit in a big room with a big

screen on which, you hope, big things will happen. Those things are called movies. But the Academy balloters, by and large, aren't true moviegoers; the movies come to them, on DVD screeners. When the members, many of whom are on the set for 12 or 14 hours a day, do their Oscar homework, they want a retreat from the pyrotechnics they've been creating. They want dramas that are important vet intimate, stressing method and message. Those things are called TV shows.

That's why, in the films and performances that are honored, the Oscars have become more like the Emmys. And why the Academy Awards, which used to be the highest-rated entertainment program of the year, could hit a new low with its Feb. 22 broadcast. Now, if Slumdog were battling The Dark Knight for Best Picture-sort of Dharma vs. Goliath-that would be a can't-miss fight.

And yet in the 2009 Academy slog, as in the best old romances, there is a redemption angle. If Slumdoa wins, the Hollywood establishment will have rewarded a foreign film, partly in Hindi, with no familiar faces, just a snazzy mixture of art and heart-and a movie that the audience, not the Academy, made into a hit. Isn't that worth tuning in for?

One other bonus. In India,

the TV ratings should be huge.

CRITIC'S PICKS: Here's your TIME reviewer's annotated Oscar ballot, But these predictions (not preferences) come with a caveat: Don't bet your bailout bundle on "expert" opinions. You'd do just as well with a Ouija board



2009 Oscar Ballot

RICHARA CORLISS

WHY ONLY 32 WHERE'S CLINT? WHERE'S BRUCE ?

BEST PICTURE

- ☐ The Curious Case of Benjamin
- Rutton "SPEED RACER" WUZ ☐ Frost/Nixon POBBED!
- C Milk
- ☐ The Reader
- PROHIBITIVE FANOLITE Slumdog Millionaire

BEST ACTOR

- ☐ Richard Jenkins, The Visitor Frank Langella, Frost/Nixon
- Sean Penn, Milk
- Brad Pitt, The Curious Case of Benjamin Button - IS HIS ☐ Mickey Rourke, The Wrestler COMEBACK
- ALREADY PASSE?

REST ACTRESS

- ☐ Anne Hathaway, Rachel Getting
- ☐ Angelina Jolie, Changeling ☐ Melissa Leo, Frozen River

Mellssa Leo, Frozen River Meny Streep, Doubt Kate Winslet, The Reader Kate Winslet. The Reader

BEST SUPPORTING ACTOR

- ☐ Josh Brolin, Milk
- ☐ Robert Downey Jr., Tropic Thunder
- ZLAND | Philip Seymour Hoffman, Doubt AHD Heath Ledger, The Dark Knight
- 2.1.P. Michael Shannon, Revolutionary

BEST SUPPORTING ACTRESS / STADNIGEST CATEGORY Amy Adams, Doubt

- Penélope Cruz, Vicky Cristina
- Barcelona MY HEAD SAYS ... ☐ Viola Davis, Doubt - MY HEART SAYS ...
- ☐ Taraji P. Henson, The Curlous Case
- ☐ Marisa Tomei, The Wrestler HEA SEST of Benjamin Button WORK YET
- REST ANIMATED FEATURE

SHOULD UP FOR THE ☐ Kung Fu Panda WALL . E

ART DIRECTION

☐ Changeling

☐ Revolutionary Road

- The Curious Case of Benjamin Button IT'S GOT TO WIN
- ☐ The Dark Knight SIME LONSOLATION ☐ The Duchess

PRIZESI

The Curious Case of Benjamin SEST REBUILD MAKIND BRAD

Hellboy II: The Golden Army Lager S TEENAGEA

CINEMATOGRAPHY ☐ Changeling

- ☐ The Curious Case of Benjamin
- Button
- ☐ The Dark Knight
- ☐ The Reader Slumdog Millionaire

COSTUME DESIGN

- □ Australia ☐ The Curious Case of Benjamin
- MITTHE DUCHESS THE CALLY TRUE LASTUME ORIGINAL SCORE
- BRAMA IN THE TUNCH The Curious Case of Benjamin □ Milk * BEST ☐ Revolutionary Road

T SHIRTS?

BEST DIRECTOR

- ☐ David Fincher, The Curious Case of Benjamin Button
- ☐ Ron Howard, Frost/Nixon
- ☐ Gus Van Sant, Milk
- Stephen Daldry, The Reade Danny Boyle, Slumdog Millionaire

DOCUMENTARY FEATURE WEANER HERZOG

☐ The Betrayal (Nerakhoon) FIRST OSCAP

- ☐ Encounters at the End of the World
 - The Garden HAS SWEET AWAFAS Trouble the Water HEARTBREAKING. BEST OF THE LOT

- DOCUMENTARY SHORT ☐ The Conscience of Nhem En - CAMBOLA
- The Final Inch . WAR on Pour Smile Pinki - INDIAN GIRL W/CLEPT
- ☐ The Witness—From the Balcony of LIP "SLUMBOL" BENEFILIARY? MLK ASSASSINATION

- The Curious Case of Benjamin Button
 The Dark Knight Nots Eff

Slumdog Millionaire 2011

ADAPTED SCREENPLAY ☐ The Curious Case of Benjamin

- Button
- □ Doubt IT'S THAT KIND ☐ Frost/Nixon
- ☐ The Reader OF YEAR ... Slumdog Millionaire

ORIGINAL SONG

- "Down to Earth" from WALL . E, music by Peter Gabriel and Thomas
 - Newman, Ivric by Peter Gabriel I FEAR "Jai Ho" from Slumdog Millionaire, A.R. music by A.R. Rahman, lyric by WILL
 - Gulzar □ "O Saya" from Slumdog Millionaire, ComPETE WITH music by A.R. Rahman, lyric by A.R. Rahman and Maya Arulpragasam HIMSELF

- Button, Alexandre Desplat ☐ Defiance, James Newton Howard
- Milk, Danny Elfman Slumdog Millionaire, A.R. Rahman

☐ WALL • E. Thomas Newman

- La Maison en Petits Cubes
 Lavatory—Lovestory
 Oktapodi
 Presto
 This Was-1-IN 2'h MINUTES!
- S Oktapodi □ Presto

BEST LIVE ACTION SHORT FILM

- ☐ Auf der Strecke (On the Line)
- ☐ Manon on the Asphalt ☐ New Boy ☐ The Pig

Spielzeugland (Toyland)

SOUND EDITING

- The Dark Knight GREAT BANGS
- Slumdog Millionaire AND BoomS □ WALL+E
- ☐ Wanted

SOUND MIXING

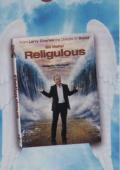
- ☐ The Curious Case of Benjamin
- Button SOUND FX GURU ☐ The Dark Knight Slumdog Millionaire BEA BURTT 115
- WALLE'S VOICE AND WALL . E ☐ Wanted SO MUCH MORE

FOREIGN LANGUAGE FILM

- Revenche SHOULD'YE REEN UP AWAIT WITH BASHIF SHOULD TEST DOC

- The Curious Case of Benjam Button FOR THE FACES
- The Dark Knight FOR THE CRASHES I from Man FOR THE FLYING

Bill Maher Religulous



From
Larry Charles
the Director of
Borat

"Hellishly Hilarious!"

- Peter Travers, Rolling Stone

"Outrageous!
Nothing Short of Brilliant!"

- Jeffrey Lyons, NBC/Lyons & Bailes REEL TALK

FEBRUARY 17



LIONSGATE ROLL MODELL

0

MUSIC

Pictures of Lily. The precocious Brit uses her second album to explore the more serious side of pop

BY JOSH TYRANGIEL



Smile Allen's

labored

sonas never feel

IN 2006, LILY ALLEN BEcame the first breakout star on MySpace, and even nonadolescents could figure out the appeal. Her debut album, Airight, Still,

had an irresistible single called "Smile", a follow-up about a dope-smoking little brother, and just enough ska and reggae samples to hint at the existence of a precioius streak. There was a minor controversy over Allen's fondness for obscenities and Mockney (the British term for the upper-class affectation of a lower-class affectation of a lower-class affectation of a lower-class affectation for lower had advanced her charm as a realigifisticking up for herself, even if no one was actually trying to keep her down.

Allen's follow-up, It's Not Me, It's You, isn't nearly as cute, but grownup things rarely are. Born in London and raised there by an actor father and a film-producer mother (as a girl, Allen

appeared as a lady-in-waiting in Elizabeth and was mentored by, among others, Joe Strummer), Allen, 23, appears to have embraced a slightly more serious view of what pop can be. Not that you can tell from the hooks. Produced by Greg Kurstin of the retro-pop duo the Bird and the Bee, the music robs every genre it can in the pursuit of anything that might stick in your ears. There's a klezmer-inspired accordion that morphs into a glossy Abba-worthy chorus on "Never Gonna Happen" and an intro that sounds like an electronic version of "Rawhide" on "Not Fair," all of which succeeds in creating enough of a melodic diversion to make you forget that the songs are split-timed and almost mechanically verse-chorus-verse.

mechanically verse-chorus verse. What's different—and better—is Allen. Her range is a tiny thing, but she dispenses with the gawhors and bilinges and sings with a pout, as if she were caught in the middle of a mildly disappointing day—though no worse than what she expected when she got up. Her voice rarely rises above the conversational and never sounds labored; nothing she sings feels like a statement, which is why you're surprised when the lyrics add up to something smart. "The Fear," already a hit in Britain, is a hummable single about vapid consumerism ("I want to be about vapid consumerism ("I want to be

rich and I want lots of money! I don't care about funny") that honors both "Lost in the Supermarket" and "Material Gill." "Not Fair" Aments that her otherwise excellent boyfriend is lousy in bed ("I look into your eyes, I want to get to know yer! And then you make this noise and it's ap-

parent it's all over") but advances from slagging wit to real disappointment in the chorus. Allen takes on a few subjects that

are beyond her grasp—"F_You," her rotten egg lobbed at George W. Bush, feels ridiculous and late—but even when she's being stupid, she sounds like an honest pop star.

To quote a line from her ballad "Who'd Have Known," "Even though it's moving forward, there's just the right amount of awkward."

Short List



The International

How bloody timely: a spy thriller where the root of all evil is ... bankers. Clive Owen is the Interpol hero, Naomi Watts his American enabler, in director Tom Tykwer's dour, generically tense drama with two snazzy kill scenes—one in a Milan piazza, the other in Manhattan's Guggenheim Museum.

2 Gomorrah

Roberto Saviano's best seller exposed the pandemic reach of the Neapolitan Mob, known as the Camorra. In Matteo Garrone's stark, epic film version, the riches of crime lure boys into deep trouble. Think Shandoq Millionaire without the girl, the songs or the redemption.

ALBUN

Keith Jarrett: Yesterdays

This isn't Jarrett the free-form improviser or crossover classicist. This is Jarrett the mainstream jazzman, live in a limber set with bassist Gary Feacock and drummer Jack DeJohnette, his aptly named standards trio. They not only play the standards—they also set them.



Romantic Comedies

Turner Classic Movies' latest mining of its grand archive is a quartet of acerbic love stories starring Katharine Hepburn: two with Cary Grant (Bringing Up Baby, The Philadelphia Story) and two with Spencer Tracy (Woman of the Year, Adam's Rib). The last one is the comic gem.



TELEVISION

Eastbound & Down

Pitcher Kenny Powers had a golden arm but a mouth and nose of clay. Offensive remarks and a coke habit left him washed up, so he's teaching gym at his old middle school. Danny McBride (*Pipic *Thunder*) is hilariously unrepentant in HBO's new anti-redemption sitcom.



For more reviews and openings this weekend, go to time.com/entertainment



Marcia Gay Harden's Short List

This star of TV, stage and film—and Oscar winner for Best Supporting Actress in Pollock—is currently playing an in-your-face lawyer on the critically acclaimed FX series Dumages. In March she returns to Broadway, joining James Gandolfini, Jeff Daniels and Hope Davis in a production of Yasmina Reza's play God of Carmage. It's only fitting that this versatile actress has tastes ranging from landscape painting to Silly Symphonium.

Frozen River

Saw this first in Sundance and fell in love with the beyond-powerful performances by Melissa Leo and Misty Upham. A gritty, suspenseful tale of two women who engage in smuggling immigrants over the Canadian border.

Justin Thompson

This guy plays like Django Reinhardt, croons like Chet Baker and writes like Fats Waller. Swinging out of Nashville, he is the rowdy Harry Connick Jr.

A Soldier of the Great War, by Mark Helprin

One of my favorite books, which i'm rereading. This gorgeous tale unfolds in Umbria as an old man walks—for three days—with a young boy and recounts his experiences in World War I, a war that the boy knows nothing about. The language is exquisite, the imagery powerful, and funny.

Larry Horowitz

Breathe deeply! A landscape painter who uses the brush to make poetry. In his use of color and observations of nature, he reminds me of the glorious, magnificent world in which we live. His book lives on my desk.

Comedy on the Computer

Laughing a lot at comedy shorts on websites like ucbcomedy.com and seriouslunch .com. Laughing with my kids at Disney's Silly Symphonies on YouTube.





I Wrote the Oscars! Maybe just a little bit of them. And the hugs from Hugh Jackman are all the reward I need

FOR BEASONS I ACCEPT BUT WILL NEVER FULLY UNDERstand, hundreds of millions of people would rather be entertained by the Oscars than by this column. So I fell vindicated when I got an e-mail three weeks ago from John Palermo, the producing partner of this year's host, Hugh Jackman, saying he liked my work and wanted me to write for the Academy Awards. I wasn't exactly sure how the Academy expected me to craft an opening in which Jackman quickly segued into talking about me and my sophomoric sexual obsessions, but I was up for the challenge.

Since this was clearly the biggest, most important comedy job I'd ever get, I expected the Academy to send an official package of Oscar history, tips from past writers and a truckload of money. Instead, I got just some grainy DVDs of Jackman hosting the Tony Awards. I was starting to wonder if I was really hired by the Oscars when I found out I wasn't. It turns out the Academy hires pros like Bruce Vilanch for the presenter banter but lets the host pick his own team. This makes sense when the host is a comedian with a staff of writers. It makes less sense when the host is known

for being People's Sexiest Man Alive. What I've learned from late-night Cinemax is that sexy people don't place a high value on writing.

Because Jackman lives in New York City, the writers flew from Los Angeles to work out of a room at the Mandarin Oriental hotel. I was expecting to join an enormous gathering of the greatest comedy writers in the world, who would mock me with cutting barbs about my relative youth and handsomeness. Instead, there were three dudes eating Gummi Bears from the minibar. Two of them weren't even Jewish. The third was a 27-year-old who makes Web videos and got the job when he was pitching a movie idea to Jackman's company—an idea it turned down. The Emmys, I'm guessing, is written by two interns in Bangalor.

Luckily, all four of us had a few things in common. We hated The Curious Case of Benjamin Button and had no idea that The Reader wasn't a children's magazine. We also thought Jackman shouldn't tell any jokes and should instead open with a big musical number that references the recession. But every good concept we had we immediately killed because it reminded us of Billy Crystal. You would think that would be a good thing, since Crystal

was the most beloved Oscar host ever and got the job eight times. But comedy writers are far more interested in impressing other comedy writers than in pleasing an audience. This is why most comedy sucks. If we thought we could have gotten away with an opening number that made fun of genocide, we would have. Instead, we just wasted hours making those jokes anyway. We also spent alot of time trying to figure out if we'd get in trouble for ordering room service. The answer, so far, is no.

The only proof that we really were writing for the Oscars is that Jackman would visit our room for a

couple of hours each day. To my surprise, the best kind of boss is a sexy boss. Jackman greeted each of us with a giant hug, which would have been a perfect test of how gay I am, except I was totally focused on making sure I wasn't crushed to death by his giant lats. So ... pretty gay. Jackman would laugh uproariously at everything we suggested, which is one of the huge advantages of writing for a noncomedian. He acted out all our stuff, belted out our songs while standing on furniture and even watched most of Be Kind Rewind with us for no good reason. He

was so omniscient in his niceness that not only did he look sad when we played him the Christian Bale freakout tape, but he also, after agreeing to record a parody of it, called Bale to make sure it was cool if we put it online. He even let me try on the real, si8,000 plastic Wolverine claws, which made me want to do a bit about the moon and body hair; the reaction made me realize I probably should have seen an X-Men movie before writing for Jackma.

ing for Jackman.

It soon became clear that not only was writing for the Oscars not the hardest job of my life, it wasn't even the hardest job ny my week. We brought in a guy who wrote music, and six days later, the opening number was complete. It's not had, and when Jackman sings it, it's great. Because while we weren't smart enough to write great jokes, we were smart enough to figure out that Oscar audiences don't remember jokes. They remember whether the host set the celebratory mood, as Crystal did. Our job was to get out of the way of Jackman's charm, and if that meant ordering room service and letting the other writeers do all the actual lyric writing, then I was a fine hire.

All the good jokes, by the way, were mine.



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